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ABSTRACT

This report discusses the application of the International Organization for Standards's ISO9000 quality assurance standard and Total Quality Management (TQM) to higher education in light of the "new collegialism." It defines the basic elements of ISO9000 and TQM, reviews the strengths and weaknesses of both approaches, and notes efforts to implement such approaches to quality in higher education institutions in the United Kingdom, United States, and Australia. It then provides an overview of the new collegialism, which emphasizes the development of a quality culture of continuous improvement based on a self-critical collegiate group. Although there are similarities among ISO9000, TQM, and the new collegialism, the report concludes that ISO9000 and TQM both fail to address the participatory, interactive nature of higher education. It maintains that the new collegialism adopts a transformative notion of quality that embraces process and change rather than adherence to a static specification of a product. (Contains approximately 220 references.) (MDM)

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QUALITY IN HIGHER EDUCATION PROJECT

ED 401 810

QUALITY ASSURANCE SYSTEMS, TQM AND THE NEW COLLEGIALISM

by

Lee Harvey

HE029 657

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Quality assurance systems, TQM and the new collegialism

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Professor Lee Harvey is the Senior Research Fellow and the Project Director is Professor Diana Green, Pro-Vice Chancellor of The University of Central England.

If you would like more information about the project please contact Professor Lee Harvey at the following address: Quality in Higher Education, Baker Building, The University of Central England in Birmingham, Perry Barr, Birmingham, B42 2SU. Fax. 0121-331 6379 or 021-331 6317. Tel. 0121-331 6305 or 021-331 5570.

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Lee Harvey

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QHE, Baker Building, The University of Central England in Birmingham, Perry Barr, Birmingham, B42 2SU

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EXECUTIVE SUMMARY

ISO9000 and TQM are systems of quality assurance that have been successfully introduced in some industrial and commercial settings and advocates argue that higher education would also benefit from their implementation.

However there is little evidence that higher education will ever widely adopt either model in anything approaching a pure form. Indeed, the enthusiasm for them as quality assurance and control mechanisms in higher education is subsiding. Instead, a new collegialism is emerging that overtly addresses quality issues in a responsive way.

ISO9000

ISO9000 is an international standard for quality assurance. It is not a product standard or specification nor a service standard. It does not establish a *level* of quality for a product or service. It defines quality as 'the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs'. ISO9000:

- is an external standard against which the quality assurance *system* can be assessed;
- aims to reduce or prevent error in the production of a product or implementation of a service;
- assures quality by providing clear and precise documented guidelines for every stage in the production process.

ISO9000 in further and higher education

Most work on the application of ISO9000 to education and training in Britain, New Zealand and Australia has taken place in the further education and training sector rather than in higher education. Government-backed initiatives have encouraged implementation.

Few higher education institutions have actively pursued ISO9000. In Britain, only the University of Wolverhampton have adopted it institution-wide.

There is no evidence that ISO9000 is likely, internationally, to become a significant part of higher education quality assurance systems.

Benefits of the application of ISO9000

There are six potential benefits claimed for ISO9000 in education:

1. ISO9000 demonstrates accountability: the existence of a quality assurance system, which is externally validated by independent assessors, potentially offers a more effective way of judging quality.
2. ISO9000 guarantees development: the adoption of ISO9000 will lead to periodic curriculum review and development.
3. ISO9000 can lead to delegated responsibility for quality to course-team level.
4. ISO9000 improves communication.
5. ISO9000 leads to a customer-led service: it emphasises the importance of meeting the needs of the customers.
6. ISO9000 leads to external benefits via business recognition of the standard.

Problems with the application of ISO9000 to higher education

These potential advantages, and they are real to those who have applied ISO9000 to the post-16 education sector, are heavily outweighed, for most people, by problems with the application of ISO9000 to education and training.

1. ISO9000 has a limited definition of quality. It is based on the idea of fulfilling customers' stated or implied needs.
2. ISO9000 is concerned with procedures but not with the quality of what the procedures produce.
3. ISO9000 requires the specification of a 'product' of higher education.
4. ISO9000 requires the specification of standards. However, the nature of the 'product' means that specification of 'standards' of quality are difficult to state and maintain.
5. ISO9000 requires measures of conformance to standards. In education this leads to 'measuring the measurable'.
6. ISO9000 requires checks in the production process to prevent poor quality services reaching the consumer. Teaching and learning are simultaneous, so it is impossible to set up monitoring procedures that weed out poor quality 'products' before consumption.
7. ISO9000 is about systems not people. As such, it does not gel with the preoccupations of the teachers and learners.
8. ISO9000 does not relate in any obvious way to the teaching and learning interface.
9. ISO9000 is inflexible and bureaucratic.
10. ISO9000 requires a controlled process in which inputs, process and outcome are standardised.
11. ISO9000 is incompatible with an approach that sees education as a process of transformation of the student.
12. ISO9000 is associated with managerialism, which is often resisted in post-compulsory education.

External quality monitoring and ISO9000

Registration for ISO9000 is not closely linked to quality monitoring procedures in higher education evident around the world. ISO9000 is concerned with conformance to *service* standard rather than *academic* standard. Nor does ISO9000 assess the actual quality of teaching and learning or research.

The various forms of quality audit to be found in Britain, the Netherlands, Australia and elsewhere, are far more effective and flexible in their monitoring of quality processes than ISO9000.

TQM

Total quality management (TQM) is a synthesis of management practices designed to ensure consistency of quality and responsiveness to customers. It brings together management by objectives, performance indicators, strategic planning, participative management and action learning. TQM assumes that most problems are systemic rather than caused by human error.

Generic elements of TQM

There is no single definition or approach to TQM, although the following can be found in most approaches.

- *Constant improvement*: quality improvement is a never-ending goal.
- *Cultural change*: the implementation of TQM requires cultural change within the organisation.
- *Customer-driven definitions of quality*: outcomes should reflect customer requirements, needs or preferences.
- *The 'quality chain'*: a product or service involves a process that links together a chain of customers and suppliers.
- *Organisation-wide involvement in quality: every* aspect of an organisation and every employee has an important role to play in improving the quality of the product or service.
- *Management commitment:* TQM requires the commitment of the top management and should be management-led.
- *Team work*: helps to change the culture of the organisation from one of individual competitiveness to one of mutual interdependence.
- *Built-in quality*: instead of final-stage quality control, TQM builds in quality at each stage in the process.
- *Statistical techniques*: these are used to help improve quality.
- *Organisational structure*: the structure of an organisation must be designed to support quality improvement.

Application of TQM to education and training

Commercial pressures and market orientation have encouraged a few higher education institutions in Britain, Australasia and the USA to try out TQM. Despite grandiose claims, the number of institutions introducing TQM across the range of activities is very small.

Where it is implemented, TQM tends to be partial and small scale. For example, in the United States the implementation of TQM has mainly been confined to administrative and service functions or to specific projects. In Australia, no higher education institution appears to be applying TQM across the board. This is in contrast to recommendations about implementation in industry.

'Generic' problems of TQM

There are two kinds of problem identified by critics of TQM. First, criticisms that suggest the whole approach is fundamentally flawed:

- TQM is not customer-driven. There is no evidence, for the vast majority of TQM organisations, that individual customers specify *in advance* what is required;
- TQM focuses people's attention on internal processes rather than external results;
- TQM is intrinsically bureaucratic and leads to additional burdensome procedures;
- TQM focuses on minimum standards rather than striving for high standards of excellence;
- TQM shifts the emphasis away from quality control departments only to delegate quality to specialists and experts. The notion that everyone is responsible for quality in a TQM system is a sham.

Second, criticisms that relate to the 'internal' failings of TQM:

- organisations fail to achieve the required level of communication for effective TQM implementation because there is rarely a shared vision.
- TQM inhibits innovation and undermines entrepreneurship by standardising and routinising internal processes.
- TQM fails because it lacks rigorous measurement of results.
- TQM is often viewed as a 'quick fix' by purchasers of consultancy services who, desperate for results, think they can effect rapid implementation.
- Participation in decision making at all levels rarely takes place.
- Too many versions of TQM fail to focus on outcomes, preferring, instead, rather more vague notions such as 'continual improvement' or 'management by objectives'.

Problems of implementing TQM in higher education

Many of the specific problems of implementing TQM in higher education include:

- the identification of customers and products: higher education has a variety of outputs and of users, participants or clients. There is no clear concept of product and customer;
- perceiving students as customers: they are participants in a learning process rather than passive recipients of a product or service;
- identifying *post hoc* satisfaction with provision, rather than any attempt at establishing student requirements in advance;
- aiming for a consistent product or outcome: this might suit mass produced components or consumer products but it is not commensurate with the exploratory nature of higher learning;
- the failure of TQM implementation to address the teaching and learning process;
- the high costs of TQM implementation with no clear evidence of benefits in terms of knowledge production or enhanced student learning;
- staff resistance: many staff are cynical of the managerialism and evangelism of TQM, suspicious of management motives and resentful of implied blame for unspecified prior 'failings';
- the increased layers of management and unnecessary burden of extra work with no discernible pay-off in the academic context;
- the problem of establishing team-working, which is an alien process for many academics who are valued by their institutions for their individual contribution;
- the inappropriateness of statistical procedures for measuring educational quality.

Repackaging

There is a tendency among TQM enthusiasts to repackage a range of research and management procedures as their own, and to ascribe all improvements to TQM.

For example, market research tools and basic social research techniques are being claimed as TQM approaches, including customer-satisfaction surveys, multivariate analysis and longitudinal action research.

Similarly, the claim that all improvements in education are due to TQM extends to a range of standard practices as diverse as periodic review of courses, monitoring of student assessment turnaround, team development of new courses, devising student coursework assessment criteria, end-of session summary feedback procedures, as well a host of other teaching and learning 'innovations' and staff development processes.

TQM a passing fad?

Despite the effort and resources expended on inaugurating TQM there is little evidence that they have any major impact across the higher education system nor that they deliver any improvement at the staff-student interface.

There is not much to suggest that TQM is other than yet another passing fad. TQM is certainly not an option an institution should take just because it may have been of some use somewhere else. It is essential to evaluate the potential benefits carefully and estimate costs of all kinds before embarking on what might be an unnecessary voyage. Indeed, what may accrue to higher education from TQM might be much more readily and effectively gained by encouraging the new collegialism.

The new collegialism

Collegialism is a term meant to imply the institutionalisation of aspects of collegial practices and aspirations. Collegialism is characterised by three core elements:

- a process of shared decision-making by a collegial group in relation to academic matters:
- mutual support in upholding the academic integrity of members of the group;
- conservation of a realm of special knowledge and practice.

The new collegialism is the radical alternative to the cloisterism of the traditional collegiate approach.

Academic cloisterism is inward-looking, individualistic, self-serving and self-regulating, characterised by esoteric knowledge and opacity.

The new collegialism:

- is outward looking and responsive;
- emphasises continuous improvement;
- emphasises professional accountability ;
- encourages team-working;
- focuses on the total student learning experience;
- views students as participants in a process of learning rather than as a customers or as an end-product;
- focuses on the outcomes of higher education as well as the process.

The new collegialism is not so much concerned with elaborate systems as with effective action at both the teacher-learner interface and in terms of research productivity.

External quality monitoring and the new collegialism

New collegialism meshes with external quality monitoring, but emphasises improvement over accountability.

The new-collegiate approach emphasises the development of a quality culture of continuous improvement. This shifts the primary emphasis on quality from external scrutiny to internal effective action. It requires a bottom-up response to top-down quality monitoring. A necessary element of this process is a self-critical collegiate group, prepared to set their own agenda for improvement and to ensure action to fulfil quality commitments.

A cloisterist approach hands the initiative to external bodies. A new-collegiate approach grasps the initiative and demonstrates that accountability is achieved through a process of continuous quality improvement.

Conclusion

Some institutions in the United Kingdom, the United States of America and Australasia are in the early stages of implementing quality assurance systems based on ISO9000 or TQM.

There is little indication that TQM or ISO9000 have any impact on quality at the teaching and learning interface or on the creativity involved in research.

There are some parallels between TQM and the new collegialism, such as delegated responsibility for quality, team working and the culture of quality improvement.

However, there are fundamental differences. TQM is fixated on a product or service supplied to a customer (or client). Higher education is a participative process. There is no simple, discernible end-product of higher education, it is an ongoing transformative process that continues to make an impact long after any formal programme of study has been completed. In essence, TQM addresses a partial 'pragmatic' notion of quality that is of marginal use in the context of higher learning and knowledge development. The new collegialism adopts a *transformative* notion of quality that embraces process and change rather than adherence to a static specification of a product.

Effort might be more profitably directed to encouraging the development of open, self-reflective collegialism rather than the importation of expensive, bureaucratic, unwieldy, alienating, managerialist approaches from industry.

Chapter 1
INTRODUCTION

The moment at which industrial models of quality assurance would sweep all before them in higher education has passed. The pockets of enthusiasm around the world for Total Quality Management (TQM) and ISO9000 remain but the momentum that may have elevated them into serious contention as quality assurance and quality control mechanisms in higher education has subsided.

Both ISO9000 and TQM are quality processes that derive from manufacturing industry. ISO9000 is an international standard against which quality assurance *systems* can be assessed. TQM is a general term that covers a variety of approaches to quality management, which have in common the intention of ensuring that quality is monitored throughout the process of production, with everybody taking responsibility for quality, rather than just being checked at the end.

ISO9000 and TQM have apparently been successful in manufacturing industry and this has led to them being adopted in some service industries, including post-compulsory education.

ISO9000 has made most progress in Britain, New Zealand and Australia, where there has been limited adoption in the post-compulsory, vocational, educational sector. A few higher education establishments in these countries have also introduced it. However, there has generally been a considerable degree of scepticism about the potential of ISO9000 for higher education. Its mechanistic approach to quality-assurance procedures does not sit well with educators and, overall, it has failed to seize the imagination of educational managers.

TQM has a wider appeal in higher education circles but it is has also failed to attract sufficient converts to make it a potent force in quality assurance and development in higher education. TQM, sometimes equated with a religious movement with born again converts has not, as we shall see, suffered quite the same faithlessness as ISO9000 but has emerged more as a sect than a paradigmatic religion within higher education. Like all useful and threatening sects the heresy has been absorbed into, at least one branch of, the main church—collegialism.

Collegialism

Collegialism is a term meant to imply the institutionalisation of aspects of collegial practices and aspirations. Collegialism is characterised by three core elements:

- a process of shared decision-making by a collegial group in relation to academic matters:

  > Unlike a business with a clear management structure, in a university 'no individual has overriding power of action, but many have enough power for obstruction, and decision-making is difficult, even in the most minor matters. Change in university comes about through many tiny increments, no one of which is large enough to rock the boat. These increments are represented as small reasonable remedies in response to great pressures, and take account of personal and territorial interests. The collegiate approach leads to a lack of individual accountability: everyone must agree, but no one is accountable. (Woodhouse, 1994, p. 26)

- mutual support in upholding the academic integrity of members of the group;
- conservation of a realm of special knowledge and practice.

There has been a revival of interest in collegialism in the wake of the sustained managerialism of the late 1980s (CVCP, 1985; Green and Harvey, 1993; Hart and Shoolbred, 1993; Holmes, 1993; Trow, 1993; Griffith, 1994; Miller, 1994).

This revival of interest in collegialism can be characterised as having taken two paths—a conservative tendency and a radical alternative. The conservative tendency attempts to reassert the centrality of academic autonomy. It emphasises the absolute right of the collegial group to make decisions relating to academic matters, regards the integrity of members as inviolable (except where exceptionally challenged from within), and considers the role of group as that of developing and defending its specialist realm, which is usually discipline-based.

This approach tends to be staff-directed, producer-oriented and research-dominated. It relates to the internal concerns of the group and sees students as novices to be initiated into the mysteries of the discipline. It is effectively inward looking. The knowledge it possesses is revealed incrementally and according to the dictates of the self-appointed 'owners'. The skills and abilities it expects students to develop are often implicit and obscure. Sometimes the expectations of students are deliberately opaque and shrouded in mystifying discourse. In short, at one extreme the traditional tendency reflects a medieval cloister.

The radical alternative disavows the inwardness of the cloisterist approach while retaining its scepticism of management-dominated quality assurance processes. The radical approach sees the collegial group as the forum for academic decision making but is prepared to enlarge that group to allow discourse and negotiation with significant others, not least students. It emphasises accountable professional expertise rather than the inviolable academic integrity. Its perceived role is one of widely disseminating knowledge and understanding through whatever learning-facilitation and knowledge-production processes are most effective.

The radical tendency is thus outward-looking and responsive to changing circumstances and requirements. It is learning-oriented. It focuses on facilitating student learning rather than teaching, and explicitly encourages the development of a range of skills and abilities. It prefers transparency to obscurity. This radical alternative represents the new collegiate approach to higher education.

Of course, these characterisations are rarely so clear-cut or evident in practice. However, the paper demonstrates that, while neither ISO9000 nor TQM are likely to take-off in higher education and are of very limited value, elements of the latter have been absorbed into a new collegiate approach. This absorption of some tenets of TQM has led to an explicit expression of the workings of collegialism and the nature of academic autonomy and professionalism (Warren Piper, 1994). It has, thus, helped to call into question the mysticism of academic cloisterism.

In Chapter Two, the nature and relevance of ISO9000 to higher education will be explored and attempts to introduce it in Britain and elsewhere will be considered. Chapter Three explores the nature and relevance of TQM to higher education and attempts to implement it in the USA, Britain and Australia are scrutinised. Chapter Four explores the new collegialism in more detail and shows how elements of TQM have been absorbed, whether directly or indirectly, into a revived and explicit professional collegialism.

Chapter 2
ISO9000

Quality assurance is a term that covers a range of different activities in higher education and there is often confusion between formalised systems of a quality assurance, such as ISO9000 and quality management approaches such as TQM (Taylor and Hill, 1993). There is some degree of overlap but the two are distinct and will be treated separately.

What is ISO9000?

ISO9000 is an international standard for quality assurance. It is not a product standard or specification nor a service standard. It does not establish a *level* of quality for a product or service. ISO9000 is an external standard against which the quality assurance *system* can be assessed.

Quality assurance is defined (in BS4778) as 'all activities and functions concerned with the attainment of quality'. ISO9000 thus describes a quality assurance system as one which ensures that:

- a product or service is designed to meet the needs of customers;
- the production process is as effective and efficient as possible.

Quality is assured by providing clear and precise documented guidelines for every stage in the production process. ISO9000 requires the institution to produce detailed handbooks or manuals on a selection of its procedures. Such manuals provide detailed procedures of how processes are carried out and monitored, including descriptions of what happens when things go wrong. 'It is a partial system, in the sense that its major concern is with documents rather than actions' (Elliott, 1993, p. 35).

The link between ISO9000, BS5750 and other quality assurance standards

ISO9000 started life as BS5750 a British standard, which was first published in 1979 (BSI, 1990). In the first decade of operation some 10,000 firms in the United Kingdom registered against BS5750 for all or part of their operation.

Since BS5750 was first produced it has attracted substantial interest in many other countries. As a result the International Organisation for Standards published the ISO9000 series of five standards in 1987 (ISO, 1987). The ISO9000 series was adopted by the British Standards Institute without deviation in 1987 (BSI, 1987). Therefore BS5750 and ISO9000 are now synonymous (BSI Quality Assurance, 1991). ISO9000 is also identical to the European Standard EN29000 and the Australian Standard AS3900.

The elements of ISO9000

There are a total of five parts to ISO9000: two introductory and three substantive parts. The introductory parts (both described as Part O) are *Notes of guidance concerning use of the standard* and *The character of overall quality management systems.*

Part 1 relates to quality specifications for design, development, production, installation and servicing. The specification of goods or services are based on customer requirements. The performance specification is then provided by the supplier.

Part 2 relates to situations in which the firm is not itself involved in designing or specifying the product or service. It sets out requirements when a firm is manufacturing goods or offering a service to a published specification or to the customer's specification.

Part 3 is even more restricted in its terms of reference and specifies the quality system to be used only in relation to final inspection and test procedures.

Definition of quality and underlying aim of ISO9000

The definition of quality used by the British Standards Institute is 'the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs' (BS4778, 1987, *Quality Vocabulary: Part 1 International Terms* (ISO 8402) see BSI (1990)).

ISO9000 aims to reduce or prevent error in the production of a product or implementation of a service and, thereby, to do away with the traditional quality-control approach of counting failures. This requires regular monitoring of the process at each stage and, if an error is detected, immediate action must be taken to identify and correct the root cause of the problem (which may not be human error but a fault in the design of the production process).

Certification for ISO9000

Assessment and certification for ISO9000 is undertaken by certification bodies. This is described as 'third party assessment'. There are several Independent Certification Bodies who, for a fee, provide certification of the standard.

The quality of service provided by the certification body is controlled by the National Accreditation Council for Certification Bodies (NACCB). The NACCB accredits certification bodies as appropriate for assessing and certifying particular types of organisations. For example, a certification body may have accreditation to certify manufacturing organisations but not those in the service industry.

In addition to the initial assessment and certification, there are two compulsory maintenance audit visits per year to check that the organisation is still meeting the standard and that problems revealed at the previous audit have been corrected.

The development of ISO9000 for education and training

In 1990, the British Standards Institute (BSI), assisted by representatives from colleges and quality-related organisations undertook a review of ISO9000 and its applicability to education and training (Rooney, 1991a). A group of certification bodies, together with other interested bodies had developed guidelines for education and training in consultation with a wide range of organisations (BSI Quality Assurance *et al.*, 1991). In February 1991 the Institute published the first edition of the ISO9000 guidance notes for application to education and training, which were to be used in conjunction with ISO9000 (BSI Document No E00146).

During the review BSI recognised that there were philosophical and practical differences between education and training. However, the Institute was of the view that these differences did not significantly impact on quality systems and therefore would not be differentiated in their guidance notes (Turner, 1993, p. 37).

Certification bodies, sensing that there might be a new and possibly very large market for their services have been quick to show an interest in the application of ISO9000 to education and training. However, the accreditation, by NACCB, of certification bodies as appropriate for certifying education and training organisations was delayed because of a difficulty in clarifying the criteria that should be used in the accreditation process. With the support of the Department for Education (DFE)

Chapter 2
ISO9000

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The link between ISO9000, BS5750 and other quality assurance standards

ISO9000 started life as BS5750 a British standard, which was first published in 1979 (BSI, 1990). In the first decade of operation some 10,000 firms in the United Kingdom registered against BS5750 for all or part of their operation.

Since BS5750 was first produced it has attracted substantial interest in many other countries. As a result the International Organisation for Standards published the ISO9000 series of five standards in 1987 (ISO, 1987). The ISO9000 series was adopted by the British Standards Institute without deviation in 1987 (BSI, 1987). Therefore BS5750 and ISO9000 are now synonymous (BSI Quality Assurance, 1991). ISO9000 is also identical to the European Standard EN29000 and the Australian Standard AS3900.

The elements of ISO9000

There are a total of five parts to ISO9000: two introductory and three substantive parts. The introductory parts (both described as Part O) are *Notes of guidance concerning use of the standard* and *The character of overall quality management systems.*

Part 1 relates to quality specifications for design, development, production, installation and servicing. The specification of goods or services are based on customer requirements. The performance specification is then provided by the supplier.

Part 2 relates to situations in which the firm is not itself involved in designing or specifying the product or service. It sets out requirements when a firm is manufacturing goods or offering a service to a published specification or to the customer's specification.

Part 3 is even more restricted in its terms of reference and specifies the quality system to be used only in relation to final inspection and test procedures.

Definition of quality and underlying aim of ISO9000

The definition of quality used by the British Standards Institute is 'the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs' (BS4778, 1987, *Quality Vocabulary: Part 1 International Terms* (ISO 8402) see BSI (1990)).

ISO9000 aims to reduce or prevent error in the production of a product or implementation of a service and, thereby, to do away with the traditional quality-control approach of counting failures. This requires regular monitoring of the process at each stage and, if an error is detected, immediate action must be taken to identify and correct the root cause of the problem (which may not be human error but a fault in the design of the production process).

Certification for ISO9000

Assessment and certification for ISO9000 is undertaken by certification bodies. This is described as 'third party assessment'. There are several Independent Certification Bodies who, for a fee, provide certification of the standard.

The quality of service provided by the certification body is controlled by the National Accreditation Council for Certification Bodies (NACCB). The NACCB accredits certification bodies as appropriate for assessing and certifying particular types of organisations. For example, a certification body may have accreditation to certify manufacturing organisations but not those in the service industry.

In addition to the initial assessment and certification, there are two compulsory maintenance audit visits per year to check that the organisation is still meeting the standard and that problems revealed at the previous audit have been corrected.

The development of ISO9000 for education and training

In 1990, the British Standards Institute (BSI), assisted by representatives from colleges and quality-related organisations undertook a review of ISO9000 and its applicability to education and training (Rooney, 1991a). A group of certification bodies, together with other interested bodies had developed guidelines for education and training in consultation with a wide range of organisations (BSI Quality Assurance *et al.*, 1991). In February 1991 the Institute published the first edition of the ISO9000 guidance notes for application to education and training, which were to be used in conjunction with ISO9000 (BSI Document No E00146).

During the review BSI recognised that there were philosophical and practical differences between education and training. However, the Institute was of the view that these differences did not significantly impact on quality systems and therefore would not be differentiated in their guidance notes (Turner, 1993, p. 37).

Certification bodies, sensing that there might be a new and possibly very large market for their services have been quick to show an interest in the application of ISO9000 to education and training. However, the accreditation, by NACCB, of certification bodies as appropriate for certifying education and training organisations was delayed because of a difficulty in clarifying the criteria that should be used in the accreditation process. With the support of the Department for Education (DFE) and the Department of Employment (DE) funding has been made available to support an independent set of guidance notes for the application of ISO9000 to education and training and advice to the NACCB concerning the criteria for the accreditation of certification bodies.

A steering committee, including representatives from the British Quality Association (BQA), DFE, DE, NACCB, Association of Certification Bodies (ACB) plus an education and training professional, was set up to approve the guidance notes (BQA/TSC, 1992). The resulting guidelines on *The Application of ISO 9001 to Further Education and Training* were issued by the British Quality Foundation in 1993.

In the meantime, a number of further education colleges and TECs had already worked towards ISO9000 and some now have certified status. Most are hoping that further education and training accredited status will be awarded to the certification body that assessed them and that such accreditation will be backdated to cover the period when the college was accredited.

A similar process took place in Australia, where, in 1993, Standards Australia established a sub-committee (QR2/5) to develop a draft set of quality systems guidelines to aid interpretation of ISO9000 for education and training.

ISO9000 in further education

Most work on the application of ISO9000 to education and training in Britain has taken place in the further education and training sector rather than in higher education. Similar trends can be seen in Australia and New Zealand (NZQA, 1994).

The impetus to adopt ISO9000 in further education

The initial interest in ISO9000 in British further education (FE) colleges was in part due to government training initiatives under the auspices of the Training Agency and subsequently by the Training Enterprise and Education Directorate (TEED).

The Training Agency, for example, sponsored a wide range of projects to develop quality assurance systems appropriate for Training Enterprise Councils (TECs) and their providers. It commissioned interpretation projects on ISO9000 by two specialist quality assurance contractors; Cranfield Institute of Technology and Batalas Ltd (Batalas, 1990). In total, 31 projects were established, some looking at ISO9000 and others looking at TQM (DE, 1991).

Sandwell College was the first, and still most widely publicised, ISO9000 college. It was certified for ISO9000 Part 2 in May 1991 (Collins, Cockburn, and MacRobert, 1990, 1991). Sandwell was the result of the merger of two colleges (in 1986) with different management and operating systems. After three or four years it was clear that the management system had to be overhauled. 'There was no real choice in 1991, ISO9000 was the only system available — it was needed to standardise things, established ground rules and generally help the new college settle down faster than it might otherwise have done' (Chapman, 1993).

Apart from such internal considerations, the commercial and industrial sector provides an external stimulus for colleges to adopt ISO9000 as there is an increasing expectation in Britain that all providers, including providers of training, will be registered.

Some manufacturing firms already demand ISO9000 for training contracts with local colleges. Small firms in the West Midlands wanted to deal with ISO9000 organisations and there was the concern at Sandwell that other colleges competing for training provision would register.

> We are entitled to use the registered firm logo on our literature. Industry knows what this means. It will be a marketing tool to help us in an increasingly competitive world. (Sandwell College, 1991, p. 4)

Similar external pressures were given as the main reasons for introducing ISO9000 at Crawley College: 'our customers will require it...; it is a recognised standard; there is external pressure for it;

rivals will embrace it giving them an edge' (Turner, 1993, p. 14).

In addition to the private and commercial sector, the Training and Enterprise Councils (TEC) became increasingly interested in the application of ISO9000 and TQM for their own organisation. This has had a 'knock-on' effect on further education colleges and other organisations, which the TECs contract to provide vocational education and training. The TECs expected these organisations to provide evidence that they have systematic quality assurance systems in place. For example, Norfolk and Waveney TECs insisted that colleges and training providers who wish to act as suppliers of Youth Training and Employment Training adopt ISO9000 (FEU, 1991). Many further education colleges have been working towards ISO9000 certification hoping that this will give them an advantage over other colleges when competing for TEC funding.

Take-up of ISO9000 in the further education sector

Some further education colleges (or equivalents) feel the need to register to obtain training contracts from local industry and others have benefited from registration. However, there is little indication word-wide that there is an unstoppable drive towards an international standard. Even in New Zealand, where the NZQA is heavily promoting ISO9000 and TQM, only ten per cent of colleges are 'actively pursuing quality principles' and 'probably many other movements (or fads) could claim as much' (Woodhouse, 1994).

In Britain, only a tiny proportion of colleges are registered. A recent small-scale survey is indicative of the apparent unpopularity of ISO9000 as an option in Britain. Turner's (1993) survey of 20 further education colleges in the South of Britain, revealed that only one, Northbrook College near Worthing, was intending to implement ISO9000. Twelve institutions (60%) were intending to implement some form of TQM and two colleges were considering *Investors in People* (IIP), which was, at the time, a very new initiative.

Investors in People

The *Investors in People* initiative is indicative of the fragility of the commitment of British further education to ISO9000. *Investors in People* (IIP) is an initiative that encourages improvement of organisational performance by encouraging the best from the workforce. IIP is based on the view that:

> performance is improved by a planned approach to setting and communicating business goals, developing people to meet these goals so that what people can do and are motivated to do matches what the business needs them to do. (IIP UK, 1992, p. 1)

There is a national Standard for effective investment in people that acts as a benchmark against which progress can be measured. The Standard is 'a framework for assessing the achievements of companies in investing in their people, not a blueprint for how they should go about doing it' (IIP UK, 1992, p. 13).

Although possibly another passing fad, IIP at least has the advantage over ISO9000 of addressing the essential element of further and higher education—people rather than systems.

It is this focus that has led the Training and Enterprise Councils (TEC) to switch their attention from ISO9000 to IIP. The latter fits much more naturally with the aims and quality-improvement intentions of the councils. ISO9000 is about consistency and compliance but does not guarantee quality while IIP develops people's understanding of business and impacts more directly on quality.

The new focus for the TECs has a major impact on the further education sector with the result that there is a dramatic lessening of one of the main external pressures for colleges to adopt ISO9000 in Britain. There is no reason to suppose that such fashionable fickleness will be restricted to Britain.

ISO9000 in higher education

While the college sector has been at the forefront of ISO9000 initiatives in Britain, a few higher education institutions, mainly in the former polytechnic and college sector, have also expressed an interest in gaining ISO9000 for certain components of provision, such as, short training courses. One or two institutions have introduced ISO9000 more widely.

The impetus to adopt ISO9000 in higher education

Initial interest in ISO9000 in higher education was linked to managerialist initiatives. Managers in some institutions were seeking an approach to quality assurance that did not concentrate solely on academic issues but included the functions for which they are now responsible, such as, finance and personnel (Heap and Soloman, 1992). Furthermore, most higher education institutions now have degree-awarding status and are responsible for the quality of their courses with relatively little involvement by external bodies. As the funding councils in Britain take quality into account in making funding decisions, some institutions investigated the potential of ISO9000 as a way of demonstrating the quality of their provision.

ISO9000 as a stage towards total quality

However, there is less interest overall in ISO9000 in the higher education sector than in TQM. Where ISO9000 is pursued it is usually within a strategy aiming to gain ISO9000 recognition '*en route* to a longer-term goal of introducing one of the TQM systems' (Elliott, 1993, p. 35). This is different from the strategy pursued, for example, by Sandwell College, which views ISO9000 as 'a quality system in its own right' (Chapman, 1993).

In Britain, the University of Wolverhampton has pioneered an approach to ISO9000 in higher education. In 1994, the university registered 'all activities concerned with the delivery of the product, defined as learning experiences, and delivered through courses, research and consultancy' to Part 1 of the Standard. However, it does not see this as an end in itself. The university is travelling towards TQM, 'a journey that has no ultimate destination' and has decided to implement ISO9000 as a 'tangible and visible' staging post along the way (Storey, 1993, pp. 37–8).

The approach at the University of Wolverhampton

The approach adopted at the University of Wolverhampton and the outcomes are instructive in revealing the scope of ISO9000 in the higher education context.

Rather than involve external consultants to install ISO9000 quickly, the University of Wolverhampton took a more considered and reflective approach. They were fearful that the quick fix would lead to an implementation of ISO9000 that was cumbersome, inflexible and bureaucratic. Instead they reviewed the systems in place and matched them against clauses of the Standard.

The advantages claimed by the university to date have been enhanced communication within the institution about procedures and their rationale, plus a growing feeling of ownership and control of procedures.

Quality service

The University defined quality in terms of a service. A quality service to its 'clients' should be:

- fitted to purpose;
- satisfactory to the client;
- of a quality grade equivalent to other suppliers.

Premises for incorporating ISO9000

The university had four premises for incorporating ISO9000 into its TQM strategy:

- ISO9000 was developed out of good practice in 'real' companies;
- it is a blueprint for good management;
- it involves a discipline the university needs;
- it has certain attractive feature that harmonise with TQM.

Thus, logically, if the universities' procedures are sound then they can easily be put into ISO9000 format, so they might as well apply for the Standard. If they are not sound then they need to go through the process.

Problematic nature of the premises

This may be a persuasive argument for the management of the University of Wolverhampton but there are many people in higher education who would see it as fundamentally flawed. The logic, that registration is easy if the systems are right and that it needs to be done if they are not, presupposes that the standard is worth having. A review of the premises is required.

First, that the system has been developed in 'real' (that is, manufacturing) companies is no indicator that it has any applicability to education. ISO9000 originated in safety-critical manufacturing industries such as aerospace and defence (Taylor and Hill, 1993). The quality assurance system was designed to reduce error and ensure uniformity of the product. Higher education has no simple 'product', nor is there any desire for uniformity.

Second, the assertion that ISO9000 provides a blueprint for good management is debatable in a higher education context. Similarly, what is it about ISO9000 that provides a necessary discipline for a university. The process of documenting agreed systems and procedures may 'bring discipline and greater consensus to that which was informal and perhaps ambiguous' (Taylor and Hill, 1993, p. 22). However, is there any need to go so far as to produce the rather prescriptive, bureaucratic manuals required for registration against the Standard, especially as, beyond the initial rigour of documentation, 'quality assurance tends to preserve the *status quo*'(Taylor and Hill, 1993, p. 22 [italics added]).

Finally, and much more contentious is the assertion that ISO9000 has features that harmonise with TQM. This we explore in detail below.

Enthusiasm for ISO9000 in higher education

Despite isolated pockets of enthusiasm in British higher education for ISO9000, there is no evidence that ISO9000 is likely ever to become a significant part of the quality assurance systems across the sector. Fears, voiced just a few years ago, that higher education would be faced with having to establish quality systems like the ones used in industry and warnings that higher education should not rush to embrace ISO9000 (Tannock, 1991b) now seem like overreaction.

In Britain, it appears that apart from Wolverhampton, only Luton, a very recently established university, is seriously pursuing ISO9000 across a significant part of its activities. There was little enough interest in ISO9000 in British higher education, but that has declined further in the wake of the latest initiative *Investors in People* (IIP). Staffordshire University, for example, referred at one time to BS5750 in its mission statement but has subsequently shifted its interest to IIP.

Similarly, despite encouragement in some quarters for international comparability, formal quality assurance systems such as ISO9000 are not taking off internationally in higher education.

Australia, for example, is one country where much has been made of the potential of ISO9000 (AS3900). However, there is, as yet, no widespread evidence of the adoption of international standards of quality assurance in the Australian university sector as a whole. Indeed, the establishment of a draft set of quality systems guidelines to aid interpretation of ISO9000 proved to be a difficult task in relation to the university system 'because of its diverse aims, management process and outputs' (Pithers and Peak, 1994, p. 206).

There is only one passing reference to formal quality assurance systems in the recent 'official' quality monitoring and improvement literature from Australia (AVCC/ACDP, 1988; Baldwin, 1992; Commonwealth of Australia, 1988, 1991; Dawkins, 1987; NBEET HEC, 1992a, 1992b; Warren Piper, 1993). The mention of international standards occurs in an appendix on examples of good practice, in the Higher Education Council's report to government, as a small part of a submission from The Royal Melbourne Institute of Technology (RMIT):

> Within some academic departments in both Higher Education and TAFE [Training and Further Education] sectors, serious consideration is being given to adopting international quality management standards as part of the quality development process. The rationale for such a move includes the fact that all students work, or will work, in such environments and the teaching of the quality management material, involving the standards and the recognition that adoption of the standards within the departments can bring significant benefits. (NBEET HEC, 1992b)

Clearly, RMIT exhibits the same underlying rationale for the limited adoption of international standards as do the British colleges: external business pressures.

It would be precipitous to foreclose on the potential take-up of ISO9000 within the Australian University system, given the recent draft guidelines of Standards Australia's subcommittee. It is fair to say that the value of using ISO9000 is still being evaluated. However, as those close to the subcommittee admit, it will be difficult to adopt ISO9000 without encroaching on academic freedom and autonomy or without inserting another layer of inflexible restrictive bureaucracy within university administrations, which will serve to stifle creativity and fail to receive the confidence and support of staff (Pithers and Peak, 1994).

This is a view reflected in the outcomes of a study at Swinburne University of Technology. The pilot study of the Bachelor of Information Technology programme explored the potential of ISO9000 to formalise the process of stakeholder review of academic programmes (Calway and Murphy, 1994). ISO9000 was used as a 'definitional audit' process, and generic standards from ISO9001 were used, suitably augmented by the definitional framework established by Sandwell College. The conclusion was that while ISO9000 helps to ensure conformance to standards, it does not necessarily help with innovation and the pursuit of excellence.

Benefits of the application of ISO9000

An examination of the accounts of the introduction of ISO9000 suggests six potential benefits.

1. *ISO9000 demonstrates accountability.* There is a move towards individually tailored programmes making it difficult to use standard input, process and output criteria to judge the quality of provision. The existence of a quality assurance system, which is externally validated by independent assessors, potentially offers a more effective way of judging quality. In other words, having ISO9000 may be a way of demonstrating accountability for effective use of public funds (TEED, 1991).
2. *ISO9000 guarantees development.* As the adoption of ISO9000 results in a comprehensive quality assurance system this will necessarily ensure periodic curriculum review and development.
3. *ISO9000 can lead to delegated responsibility for quality.* The adoption of the standard offers a method of developing course teams and devolving, where appropriate, power and responsibility to course-team level while retaining central strategic management. As such, it places the responsibility for quality squarely with those who control the work.
4. *ISO9000 improves communication.* There are claims by those who have implemented the

standard that it acts as a supportive mechanism and a system of communication. Hence, it is a vehicle for encouraging cross-college developments, consensus, the spread of good practice, and an opportunity for staff to demonstrate abilities and strengths (Collins *et al.*, 1990, 1991; Storey, 1993).

5 *ISO9000 leads to a customer-led service.* The standard emphasises the importance of meeting the needs of the customers. In this way it is assumed that it will provides a better service for customers and clients.

6 *ISO9000 lead to external benefits.* External features, such as business recognition of the standard and concomitant cornering of a market, are the prime benefits of the application of ISO9000 to education and training.

To capitalise on these external benefits it is necessary to be a significant player early on in the process. While not wholly congruent with pyramid-selling techniques, being first has brought considerable benefits to Sandwell College, including:

- being involved in the writing of ISO9000 specifications for education;
- auditing other institutions, both academic and leisure organisations (such as Mid-Glamorgan TEC and Bloxwich leisure centre);
- overseas lecture tours explaining how to introduce ISO9000;
- the development of a Quality Centre to train managers about ISO9000 and show them how to get it for industry;
- winning the national contract for BMW motor company training. Although ISO9000 registration was not the only factor it is perceived as a contributory factor in BMWs decision to opt for Sandwell College.

Critics who say that the costs of ISO9000 far outweigh the benefits are not correct in the case of Sandwell College. However, much of the benefit for colleges such as Sandwell are spin-offs from being among the first to obtain registration

Problems with the application of ISO9000

These potential advantages, and they are real to those who have applied ISO9000 to the post-16 education sector, are heavily outweighed, for most people, by problems with the application of ISO9000 to education and training. This is why ISO9000 has not caught on in higher education. Some of these problems are specific to education, others are common to all attempts to relate ISO9000 to service industry (Bowen and Schneider, 1988).

1 *ISO9000 has a limited definition of quality.* The standard requires acceptance of the definition of quality as fulfilling customers' stated or implied needs since the whole standard is based on this premise. There are other definitions of quality which could be applied to higher education (Richardson, 1992; Harvey and Green, 1993; Müller and Funnell, 1993) but there would be no room for competing notions of quality if ISO9000 were applied.

Doherty (1993), although an advocate of ISO9000 disagrees with the Standard's definition of quality. He suggests that in higher education quality should be defined in terms of fitness for purpose, client satisfaction and equivalence of standards.

Relating ISO9000 to education has been no easy task and even the most enthusiastic advocates such as the University Professors of Engineering have had to reconstruct basic definitions. The ISO9000 definition of quality assurance:

> all those planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements of quality

has become converted into:

> the success with which an institution provides educational environments which enable students effectively to achieve worthwhile learning goals, including academic standards...worthwhile learning goals are established through consideration of customers in the context of the disciplines of the course providers.

Similarly 'good teaching' becomes:

> providing educational environments which help students to achieve their chosen learning goals. (Sparkes, 1992, pp. 2–3)

This ambiguity, amongst other things, has, in fact, led the engineering professors to an alternative to the ISO9000 model for higher education (Burge and Tannock, 1992).

2 *ISO9000 is concerned with procedures but not with the quality of what the procedures produce.* ISO9000, like any other quality assurance standard tells you nothing about the quality *per se* only that there are processes in place in the institution for monitoring quality (Training, Enterprise and Development Group, 1990; Training Agency, 1990). ISO9000 only sets the standard for the system not the standards that the college should be achieving (Sallis and Hingley, 1991) 'it tells us nothing about the quality of the education itself' (Rooney, 1991b). Indeed, this approach is so preoccupied with procedural 'standards' of consistency that it pays scant regard to academic standards of attainment. Process standards and academic standards of attainment are not the same and, for good or ill, the international academic community is more concerned with identifying and nurturing excellence (in the sense of high achievement) than faultless uniformity (Harvey and Green, 1993).

3 *ISO9000 requires the specification of a 'product' of higher education.* There is a degree of ambivalence in attempts to relate ISO9000 to education. The *Guidance Notes for the Application of BS5750/ISO 9000/EN 29000 to Education and Training* define the output of an educational or training establishment as *either* the programme, *or* the enhancement of skills and abilities gained by a person who undergoes the education or training process. Similarly, the purchaser can be the student or trainee or any organisation in the private or public sector which purchases the service from the supplier (BSI *et al.*, 1991). The product at Wolverhampton, is 'learning experiences' (Doherty, 1993) while at Crawley College 'the student would be defined as the product' and the process would be 'all the core activities which would be required to provide a service to the student'. In addition there 'would be no distinction between the terms 'student' and 'customer'' (Turner, 1993, p. 23).

It is essential to clarify these definitions of customer and output as they determine the objectives which the quality system will assure. However, establishing appropriate objectives for education and training is not a simple task (Harvey, 1993b).

The difficulty of establishing the objectives of education and translating them into a specification may be why most further education colleges have so far applied for ISO9000 Part 2. That is, they are taking existing course or programme specifications (such as BTEC or NVQs) and designing quality assurance systems to ensure that they are implemented effectively. This issue of the product of higher education will be developed further in the discussion below on TQM.

4 *ISO9000 requires the specification of standards.* However, the nebulous nature of the 'product' means that specification of 'standards' of quality are difficult to state and maintain. In some cases services are not only physically but mentally intangible because they are difficult to grasp and understand (Walsh, 1991, p. 506).

5 *ISO9000 requires measures of conformance to standards.* In manufacturing industry

products can be measured or tested to see whether they conform to a specification. Services are intangible, and so it is much more difficult to establish standards and measure whether or not they have been achieved. In education, important areas of the service, such as the teaching and learning process, cannot be easily measured and tested.

6 *Adopting the standard can lead to 'measuring the measurable'*. As ISO9000 is about conformance to specification, the temptation is thus to identify and standardise that which is measurable and controllable to the exclusion of other factors.

7 *ISO9000 requires checks in the production process to prevent poor quality services reaching the consumer*. Teaching and learning are simultaneous, so it is impossible to set up monitoring procedures that weed out poor quality 'products' before consumption.

8 *ISO9000 is about systems not people*. As such, it does not gel with the preoccupations of the teachers and learners.

9 *ISO9000 is inflexible and bureaucratic*.

> Forgetting, for the moment, the difficulties in applying BS5750 to an area for which it was never intended, it must be realised that BS5750 has its critics even in manufacturing industry. In embracing a traditional management approach, BS5750 has been subjected to considerable criticism from quality practitioners in manufacturing. This is not because the standard is badly drafted, but because it tends to instil a fixed, bureaucratic 'Theory X' approach to quality management. This is in fundamental conflict with most recent thinking on quality. (Tannock, 1991b, p. 11)

In the education sector, using ISO9000 is 'like using a sledgehammer to crack a nut' (Turner, 1993).

10 *ISO9000 does not relate in any obvious way to the teaching and learning interface*. Indeed, ISO9000 could be gained for administration procedures only (Rooney, 1991b). At Sandwell College there are no discernible spin-offs from ISO9000 in relation to improvement at the staff-student interface (Chapman, 1993). Similarly, none of the declared advantages at the University of Wolverhampton refer to any positive impact on the quality of teaching and learning.

11 *ISO9000 requires a controlled process in which inputs, process and outcome are standardised*. Teaching and learning cannot be standardised or 'controlled' in the ISO9000 meaning of the term. Teaching and learning involves a relationship between the lecturer and the student and action by both is necessary. Students are not empty vessels into which learning is poured. The benefit derived from the teaching and learning process depends to some extent on the student's ability before entering higher education and the amount of effort the student is prepared make as well as the teaching ability of the lecturer. Teaching and learning involves a relationship between individuals. Therefore, it is not possible or desirable to standardise the process (to ensure that all the inputs are the same and that they are treated in the same way during the process).

12 *ISO9000 is incompatible with an approach that sees education as a process of transformation of the student*. The transformative view of higher education sees the student as a participant in a developmental process not a product to be standardised nor a recipient of a uniform product (Harvey and Green 1993). Learning and the development of knowledge is fundamentally a process of critique and reconceptualisation, which is the opposite of a defect-free, right-first-time, mechanistic approach to problem solving (Kolb, 1984; Harvey, 1990). Improving higher education in this sense is not about consistency but about enhancing the processes that enable the empowerment of the participating students (Harvey and Burrows, 1992). ISO9000 is ill-equipped to significantly contribute to this notion of higher education. There is considerable scepticism about whether a system 'originally designed for the supply of military equipment could be translated satisfactorily

in to the specific context of higher education (where students are participant-clients)' (Yorke, 1993, p. 6).

Those features of the application of ISO9000 that are compatible with improvement of the transformative process are the encouragement of communication, exchange of ideas and good practice, the development of teamwork and of consensus. These are, indeed, laudable but are achieved, using ISO9000, at the expense of setting up an unnecessary bureaucratic machinery. In essence, all of this much more easily and less acrimoniously achieved through collegialism, as will be discussed in Chapter 4.

13 *ISO9000 is associated with managerialism.* The problem is not whether ISO9000 is consistent with managerialism, nor whether managerialism is incompatible with the collegial organisation of higher education. The problem is that managerialism is perceived negatively in some areas, not least because it frequently involves a shift towards a more formalised management structure. The formality and bureaucracy involved in ISO9000 certification is seen as indicative of a managerialist approach.

The managerialist link to ISO9000 is evident at Wolverhampton. Storey's account of the implementation of ISO9000 'shows the gap that is perceived between staff and management' (Yorke, 1993, p. 5).

External quality monitoring of educational provision and ISO9000

There is an issue of how registration for ISO9000 fits in with the processes of external quality monitoring being put in place by government agencies. In Britain, for example, the Higher Education Quality Council (HEQC) undertakes audits of the quality assurance systems in higher education institutions. There is a clear difference between the processes adopted by the Quality Audit Division of the Council and the third-party approach of ISO9000 auditors. HEQC's audits are designed to be sensitive to the mission, practices and culture of higher education. They follow audit trails to explore how the quality system works. They are not directly concerned with checking standardised procedures against specifications in quality manuals.

It is hard to see how the two processes interact. For example, at the University of Wolverhampton, the auditors did not delegate any elements of their auditing function to the third-party audits undertaken as part of the ISO9000 process.

Indeed, in their overview of the academic audit process, *Learning from Audit*, the Council makes just one passing reference to ISO9000 and that was in the context of a quality ethos, which the Council implies may derive from a variety of sources:

> Where audit teams observed a strong ethos and framework for quality, they noted a pervasive confidence and pride in the university and a ferment of ideas and activity related to teaching and learning and their development. The University of Wolverhampton, for example, was commended for the clarity of its BS5750 quality strategy, the vigour of implementation and the shared understanding displayed by staff at all levels. The University of Leeds and Goldsmiths' College, University of London, were commended for the active involvement, both formally and informally, of the Vice-Chancellor and Warden respectively in their quality assurance arrangements. (HEQC, 1994, p. 5).

HEQC did not, however, go on from this to suggest that ISO9000 might play a wider role in quality assurance in the sector.

In New Zealand, which has also developed a version of the British academic audit, there is no sign that there will be any linking with ISO9000. Not only has the head of the New Zealand Academic Audit expressed scepticism of industry-related quality assurance processes (Woodhouse, 1994), there is also a sense in which the university sector sees ISO9000 as the province of those institutions covered by the New Zealand Qualifications Authority (NZQA), which is actively encouraging ISO9000 and TQM.

Other forms of external monitoring of higher education, such as direct assessment of discipline areas like those being undertaken on behalf of the Funding Councils in Britain, make no link at all between the concerns of the assessors and the third-party audits required for registration against ISO9000.

In the further education sector in Britain, Sandwell College is optimistic that its investment in ISO9000 will also give it a head start when it comes to external monitoring of the quality of its provision. The guidelines issued by the Further Education Funding Council (FEFC, 1993) on its quality assessment processes explicitly identifies, amongst other things, the quality assurance system operating in the institution. These guidelines appear to closely match the specifications of ISO9000 for education (apart from the reference to the *Student Charter,* (DFE, 1993)). However, according to a spokesperson for the FEFC:

> Having BS5750 will be an important part of the evidence but the FEFC inspectors will not take it as evidence of the quality of provision. Having a system is one thing, the quality of teaching and learning is another. Where it will be of importance is on the section on quality assurance, and the inspectorate will not be likely to spend so much time on audit trails, and certainly will not redo the job done by the BS5750 inspectors.

Conclusion

Advocates of ISO9000 argue that it should not be seen as an inflexible framework to be applied to education and training. On the contrary, it offers 'a systematic methodology for dealing with hassle' (Doherty, 1992). It requires that you know your requirements and your clients; that you clearly define your business, your product and what you mean by quality. Doherty, for example, suggests that the University of Wolverhampton is an education service providing learning experiences.

However, attempts to make use of ISO9000 in higher education have clearly exposed its limitations as a quality assurance tool. The various forms of quality audit to be found in Britain, the Netherlands, Australia and elsewhere, are, despite their limitations, far more effective and flexible in their monitoring of quality processes than ISO9000. The latter is concerned with conformance to standard. But this has nothing to do with academic standards, it refers principally to industrial specifications and is only applicable to education in the sense of *service* standards. Such standards might include the turnaround time for assessed work, starting classes on time, and so on. While these may be important elements of the learning process they are peripheral to the actual transformative development of the student. Furthermore, there is no need for the introduction of a cumbersome, inflexible, bureaucratic machinery to ensure the delivery of institution or course-specific service standards. In Britain, following the introduction of Student Charters, which set out broadly what students in further and higher education can expect, institutions have begun to more closely specify the *service* standards they offer at either an institutional, faculty or course level.

None of this, however, addresses the level of academic standards nor the actual quality of teaching and learning or research. ISO9000 has no role here at all. This requires some form of assessment or evaluation, which is quite beyond the limited remit of the International Standard.

Chapter 3

TOTAL QUALITY MANAGEMENT

Introduction: generic elements of TQM

Total quality management (TQM) is a 'synthesis of previously well-known management practices and theory aimed at creating a particular organisational culture dedicated to producing high quality products and services' (Warren Piper, 1993, p. 97). It attempts to combine 'tough-minded thinking and tender-hearted feeling' (Lessem, 1991) by bringing together management by objectives, performance indicators, strategic planning, participative management and action learning. TQM assumes that most problems are systemic rather than caused by human error.

Unlike ISO9000, there is no single definition or approach to TQM. Since the second world war there have been a number of exponents of TQM, each with a slightly different perspective (Drummond, 1992). Bendell (1991) suggests three groups: the early Americans (Deming, Juran, Feigenbaum); the Japanese (Ishikawa, Shingo, Taguchi); and the new Western wave (Crosby, Peters, Moller). No particular approach to TQM is significantly better than any other in industry according to a review by a non-profit research company called GOAL/TQC who compared six different variants of TQM, all of which worked (Warren Piper, 1993, p. 88).

Although there is no single definition of TQM there are a number of issues which can be found in most approaches (Oakland, 1989; Burrows, Harvey and Green, 1992b; Dale and Cooper, 1992; Dotchin and Oakland, 1992; Holloway, 1993; McCulloch, 1993; Sallis, 1993). These are summarised below.

Constant improvement

Most commentaries on TQM talk of the need for viewing quality improvement as a never-ending goal. There should be constant review of the customers' needs and constant attempts to improve the quality of the product or service. The process of producing the product or service should be kept constantly under review with the intention of improving efficiency and effectiveness. Deming (1982) talks of improving 'constantly and forever the system of production and service'. Peters (1988) describes quality improvement as a 'never-ending journey'. The last of Crosby's (1979) fourteen steps to quality improvement is 'do it all over again to emphasise that the quality improvement programme never ends'.

Cultural change

The implementation of TQM requires cultural change within the organisation (Hurley, 1992; Barnett, 1994). First, it is necessary to instil in all employees the need for quality in everything they do. Deming talks of an 'obsession' with quality and Feigenbaum (1983) talks of quality as an ethic, while Moller (1987) suggests that improvement will only come about if individuals are inspired to do their best.

Second, there is the need to develop the idea of the organisation as a team in which the good of the individual depends on the good of the organisation as a whole. For many organisations in the West this means a cultural change away from individualism towards mutual trust and interdependence.

Third, it requires a free flow of information, the development of appropriate performance indicators and management databases so that decisions can be based on evidence rather than supposition, tradition or prejudice.

Customer-driven definitions of quality

As with ISO9000, the underlying approach to quality is customer-driven. Deming (1982), for example suggests that quality is 'delighting' the customer, which means that the objective of the producer or service provider should be to pre-empt customers' needs — to work out what they need before they know it themselves. Feigenbaum (1983) emphasises that quality is not just concerned with the characteristics of the product itself but with all aspects of the production and aftercare of the product, which contribute to meeting customers' expectations. Ishikawa (1985) talks of satisfying customers. Quality is 'the total composite product and service characteristics of marketing, engineering, manufacture, and maintenance through which the product and service in use will meet the expectation of the customer'. He stresses that quality does not mean 'best' but 'best for the customers' use and selling price'. Crosby (1979, 1984) defines quality as conformance to the requirements which the company itself has established for its products, but emphasises that this should be based directly on its customers' needs. The standards that are set by the company should be dynamic and consistent with ever-changing customer requirements.

The 'quality chain'

Common to many interpretations of TQM is the notion of a quality chain. A product or service can be described as a process that involves a chain of customers and suppliers. The chain extends outside the organisation in two ways: backwards to the supplier of goods and services that the company purchases; and forwards to the end customer. At each point there is a customer–supplier relationship.

The chain also operates within the organisation. Each employee or department supplies services or products to other departments and is, in turn, a customer of other internal departments. Therefore, each individual or department should concentrate on identifying the needs of their immediate 'internal' customer in the chain and work to meet those needs as effectively as possible because a break in the customer–supplier chain will lead to a reduction in quality for the internal customer and ultimately for the end-customer.

Oakland (1989) uses the term 'quality chain' but the principle can be seen in other works on TQM. Moller (1987) talks of seeing the next person in the work process as a 'valued customer'. Juran (1988) uses the term 'quality spiral'. Deming (1982) emphasises the importance of viewing the production of goods and services as a process:

> Work comes into any stage, changes state, and moves on into the next stage. Any stage has a customer, the next stage. The final stage will send the product or service to the ultimate customer, he [sic] that buys the product or the service. Stages are not individual entities — each stage needs to work with the next stage and with the preceding stage towards optimum accommodation.

Organisation-wide involvement in quality

A central tenet of TQM is that every aspect of an organisation and every employee has an important role to play in improving the quality of the product or service not just those involved directly in the 'production' process.

> For an organisation to be truly effective, every single part of it must work properly together. Quality, the way we have defined it as meeting the customer requirements, gives people in different functions of an organisation a common language for improvement. It enables all the people, with different abilities and priorities to communicate readily with one another, in pursuit of a common goal. (Oakland, 1990, p. 7)

The organisation-wide involvement is consistent with the notion of the quality chain and the recognition that activity anywhere along the chain will have a 'knock-on' effect. The organisation-wide approach to quality needs to be formalised through the development of clear quality systems to which everyone can relate and which empower people at all levels in the organisation to act for quality improvement. Such systems must provide constructive criticism and responsive action that feedback into clear structures of responsibility.

Many exponents of TQM argue that the majority of problems within an organisation are the fault of poor management rather than the fault of the work force. Most problems are inter-departmental or are faults in the design or implementation of the system, which can only be put right with management agreement. For example, Deming (1982) argues that as much as ninety-four per cent. of potential quality improvements are the responsibility of management. Similarly, Juran (1988) suggests that eighty-five per cent. of quality problems are management-controllable defects.

Management commitment

An organisation-wide approach to the implementation of TQM requires the commitment of the top management and is management-led (Crosby, 1986; Harrington, 1987; Garvin, 1988). Furthermore, for most commentators, there has to be a formal programme of education and training for all staff (Hurley, 1992).

In short, management is responsible for setting and resourcing quality policy, providing motivation through leadership, and equipping people to achieve quality (Dotchin and Oakland, 1992; Holloway, 1993).

Team work

Team work is seen as an important ingredient in the implementation of TQM (Rank Xerox, undated; Hayes, 1985). Team work helps to change the culture of the organisation from one of individual competitiveness to one of mutual interdependence and collaboration. It helps to motivate the work force which is crucial given that TQM is built on the premise that everyone in the organisation must strive to improve quality.

Quality circles, which first started in Japan in 1962, are teams usually drawn from the same area of the company. They are voluntary and usually include between five and ten workers. They have a leader drawn from the membership of the group and a facilitator who is a link between the manager and the team (DTI, 1991). The aim of a quality circle is to solve quality problems by pooling their individual resources. A quality circle will attempt to identify the source of a problem and suggest ways of resolving the problem to the management. The quality circle may also be involved in implementing and monitoring any changes that it has proposed.

Peters (1988) and Crosby (1984) advocate the use of multi-function teams rather than, or in addition to, quality circles as they can help to improve communications between different elements of the organisation.

Built-in quality

Most of the early quality gurus were reacting to the old notion of quality control employed in manufacturing during the early part of the century. Under this system quality was controlled by the inspection and testing of the end-product and the elimination of any item which did not meet the specification. This method of quality control was extremely wasteful and drove up the price or reduced profits because of the cost of scrap and rework.

Crosby (1984), for example, claimed that, on average, companies spent twenty per cent. of revenue doing things wrong and doing them over again and that this figure could be as high as thirty-five per cent. of operating costs in service companies. To some extent, this view is substantiated by the findings of the National Economic Development Organisation (NEDO) task force on *Quality and Standards*, published in 1985, which claimed that between ten and twenty per cent. of an organisation's total sales value is accounted for by quality-related costs (Dale and Plunkett, 1989). This estimate was based on total quality costs and, therefore, incorporated the cost of implementing a quality-management system as well as that relating to system or product failures.

Instead of final-stage quality control, TQM builds in quality at each stage in the process. Each supplier in the quality chain is responsible for the quality of the product or service he or she supplies.

Statistical techniques

The use of statistical techniques to help improve quality is a central tenet of most approaches to TQM. Their use is recommended in a range of different circumstances.

First, the costs of quality can be measured. Any change in the process of production or in the methods of quality assurance which leads to a reduction in the quality costs can be described as quality improvement because it contributes towards providing the best possible product at the lowest possible price.

Second, statistical techniques can be used to identify problems and resolve them. For example, they can be used to control the variability of the production process. A significant amount of work was done by Deming (who was a statistician by training) in this area (Gitlow and Gitlow, 1987). He distinguished between special causes of variation in the production process and common causes. *Special causes* of variation in a product process or service are those which prevent it remaining constant in a statistical sense. They are the result of special circumstances that can usually be identified and eliminated fairly quickly, for example, a new operator who does not understand the system or a batch of faulty materials. *Common causes* of variation result from defects in the design of the production process itself and can only be reduced by changing the system. Deming believed that managers who lack this understanding of variation, and confused the two types, could make matters worse.

Deming and many other exponents of TQM believe that improving systems of production to reduce common causes of variation provides most scope for quality improvement. Most of the work undertaken to improve systems of production have focused on reducing the margin for human error.

Ishikawa (1976) is best known for promoting the use of simple statistical techniques to improve quality, such as, Pareto diagrams, Cause and Effect diagrams (also known as Ishikawa or Fishbone diagrams), control charts and scatter diagrams. He advocated the use of statistical techniques not just to solve problems in the production process but also to determine policy or solve problems in sales or personnel.

Organisational structure

Exponents of TQM advocate that the structure of an organisation must be designed to support quality improvement rather than inhibit it. This has a number of implications.

First, the traditional role of the quality control department must be revised. In TQM, quality is everyone's responsibility rather than that of a single entity in the organisation. If there is to be a separate quality assurance department it should not have line functions for checking and monitoring quality in the product or service. Instead its role should be to facilitate quality improvement by the rest of the organisation (Oakland, 1989).

Second, the barriers to communication between different components of an organisation should be broken down by the development of multi-function teams to solve specific problems.

Third, a central tenet of TQM is that those directly involved in a process are best able to identify and implement quality improvement. Decision-making should occur no higher than necessary in the hierarchy. Workers should be encouraged to take direct responsibility for quality and the role of managers is not to supervise their activities but lead them and support them in making quality improvements (Deming, 1982).

Fourth, training is given a high profile in the implementation of TQM. All staff need training to understand the principles of TQM. If staff are to take responsibility for quality they need the tools to do so, including simple statistical techniques and approaches to problem-solving.

TQM variations

Although there are generic elements that can be identified in most TQM approaches there are also differences in emphasis. Harari (1993) estimates that there are almost a thousand versions of TQM and that it has become a billion-dollar industry in its own right. The key differences between TQM approaches are the relative emphasis given to:

- the use of statistical procedures;
- reflecting customers wants or needs;
- anticipating customer desires;
- and fitness for purpose or consistency.

For example, exponents of TQM influenced by Crosby aim at a fault-free supply or service that conforms to specified standards, the benefits of which offset the costs (Halpin, 1966; Ingle, 1985; Oakland 1990). ‘TQM is concerned chiefly with changing attitudes and skills so that the culture of the organisation becomes one of preventing failure and the norm is operating right first time’ (Oakland, 1990, p. 8).

For those influenced by Deming the emphasis is on fitting or exceeding customer expectations and using statistics to measure performance in all areas with a view to reducing variability by continuous, incremental improvement (Scherkenbach, 1986; Gitlow and Gitlow, 1987).

Juran and his followers emphasise a fitness-for-purpose approach, which sets team goals on a project-by-project basis and warns against campaigns to do perfect work, ‘tool-driven’ approaches and assuming that quality is free (Juran and Gryna, 1980).

Each ‘quality guru’ puts a different slant on what is an essentially pragmatic and prescriptive process. TQM has no theoretical or epistemological underpinning—it is pragmatic. The ‘core’ features of TQM outlined above have not been:

> explicitly developed as a coherent organizational paradigm. No single theoretical field can lay claim to explaining how TQM should operate. We see in the work of Juran and Deming the products of minds which have been informed by many directions, and ideas that have developed over many years within a holistic framework. (Holloway, 1993, p. 5)

Before exploring the role of TQM in post-compulsory education and training it is first important to address the relationship between TQM and ISO9000.

ISO9000 and Total Quality Management

Some people view ISO9000 and TQM as complementary, sometimes even synonymous; while others argue that their underlying philosophies are in opposition (Tannock, 1991b, p. 11; Taylor and Hill, 1993).

Whether they harmonise or not depends on the version of TQM to which ISO9000 is being linked. Some advocates of TQM, especially those who pursue a ‘right-first-time’ approach, recommend the use of a systematic quality assurance system to support constant improvement. Oakland (1990), for example, sees a documented quality management system, such as ISO9000, as one of three major components of TQM.

Wolverhampton have adopted a 'zero-defects' approach (Crosby, 1979, 1984, 1986), encapsulated in five key factors: know the requirements; error-free delivery; error prevention; count the cost; recognise your client. Their approach is summed up in the quality statement: 'we will foster a cost-effective, do-it-right-first-time culture by understanding and conforming to the requirements of our task at all times' (Storey, 1993, p. 44). For the university, the features that harmonise with their preferred TQM model are that responsibility must be specified at every point of a procedure; error must be traceable; error and system failure must be corrected; the system is open and known; everyone must understand the requirements; and training is a key factor. The emphasis is on getting things right first time and cutting out hassle. [2]

Some institutions 'prefer to develop a total quality culture first, on the grounds that registration under ISO9000 would be a relatively easy spin-off' (Yorke, 1993, p. 6). For example, at Crawley College 'the decision was made to take the College down the Total Quality Management route with the proviso that this would lead into full implementation of ISO9000 at a later date' (Turner, 1993, p. 14). However, despite the college having made a number of positive moves towards providing a better quality service for the customer:

> It is impossible to guess at this stage what the final outcomes of the quality initiative will be and whether Crawley College will ever reach the point where their quality systems meets the requirements for certification under ISO9000 Quality Systems. (Turner, 1993, p. 50)

Others argue that, for most organisations, ISO9000 is not an appropriate place to start developing a total quality approach, although they may be pressured into it by customers (Binney, 1992). 'The effort to acquire a quality management system that is designed to ensure conformance to specification can distract the company from developing its capacity to be continually responsive to changing customer needs' (Holloway, 1993, p. 7). Ensuring the integration of quality with the company's values, management behaviour and strategy is viewed as far more important than a system for conformance to specification.

ISO9000, it is argued, curtails rather than harmonises with TQM. The bureaucracy and restrictiveness is at variance with many elements of TQM such as delegated responsibility.

> A rigid, bureaucratic, external standard that requires the documenting of procedures is ' in direct conflict with the TQM culture of flexibility and delegated responsibility for continuous quality improvement' (De Winter) As the American Society for Quality Control have pointed out 'the ISO9000 series intentionally does not emphasise the ability to demonstrate continual quality improvement capability'. (FEU, 1991)

Similarly, ISO9000:

> places great emphasis on written evidence, documented systems and procedures. However, it does not require any focus on either cost-effectiveness or continuous improvement *per se*. By contrast, TQM has "improvement" as its main goal. Unlike ISO9000 there is no minimum standard which one may attain. The process of TQM is thus described as a never-ending journey, owing to the changing demands of the environment and the relentless search for improvement opportunities. TQM [recognises]... the impact on quality of the whole organisation, whereas ISO9000 is mainly confined to the purchasing, sales and production functions or their equivalents. (Taylor and Hill, 1993, p. 22)

Application of TQM to education and training

TQM has been tried out in higher education institutions in Britain, Australasia and the USA in recent years mainly as a result of increasing financial pressures and the need to 'behave like commercial enterprises in a fiercely competitive market' (Williams, 1993, p. 229). However, there has been little serious implementation of TQM in higher education and what has been tried has met with 'patchy success to date' (Yorke, 1993, p. 3).

In the USA, only a handful of institutions are seriously committed to TQM despite being encouraged by funding bodies to adopt quality improvement procedures so as to become more effective and efficient (Muffo, 1992). Marchese (1991) identified twenty-four institutions that have adopted TQM institution-wide, of which only five have any significant experience. Given that there are 3,614 colleges in the USA this is not a significant number.

In the wake of increasing pressures on efficiency there is a recent expansion in *interest* in TQM (Chaffee and Sherr, 1992; Seymour, 1992). Marchese (1992b) refers to an 'explosion of interest' in TQM amongst members of the American Association for Higher Education. A similar thing happened in Britain but the interest did not develop into implementation in higher education. It is also doubtful, in the USA, that interest in TQM will translate into the ground-swell enthusiasm of the Assessment Movement (AAHE, 1990a, 1990b; Paskow, 1990, Astin, 1991). The latter's appeal is that, although State legislatures applied pressure that initiated the Movement, it focuses on student learning and thus is germane to the practising teacher who retains control of the of the process (Hutchings and Marchese, 1990; Cross, 1990; Edgerton, 1990; Wright, 1990; Millard, 1991).

TQM, as it is currently being implemented in the United States is all about being more productive and containing costs than improving the learning experience and attainment of students. Myrna Whittington at the University of Pennsylvania , for example, noted that the decision to turn to TQM was that 'we have to do more with less' and that 'our people had to be more productive' in the face of 'escalating costs, unhappy customers, sloppy services'. As TQM had worked for Motorola and Kodak it 'looked like a candidate for managing our affairs better' (Marchese, 1992a).

In Britain, it appears that only two or three universities, apart from Wolverhampton, have attempted to implement TQM across the institution. In Australia, any initial steps at implementation are mainly restricted to Training and Further Education (TAFE) colleges. Similarly, in New Zealand, encouraged by the New Zealand Qualifications Authority (NZQA), TQM is a currently fashionable in the non-university sector of post-16 education (NZQA, 1992, 1994). In Japan, in contrast to the situation in industry, TQM is a 'non-starter' in institutions of higher education (Warren Piper, 1993).

In higher education, TQM tends to be most frequently implemented initially on a small scale rather than changing the entire organisation. This may be because it is seen as having limited applicability and is directed to areas that seem most suited to it. For example, in the United States the implementation of TQM has mainly been confined to administrative and service functions or to specific projects (Warren Piper, 1993). Axland (1990) reports that half a sample of 78 American universities are using TQM principles to run their administrations, although in twelve cases this was confined to a particular area of administration. There was greater reluctance among universities concerned to apply TQM principles to their academic programmes.

In Australia, no higher education institution 'appears to be applying TQM across the board' (NBEET HEC, 1992b, p. 70). However, some are applying it to specific areas. The University of New South Wales, for example, has implemented TQM in its buildings and facilities areas and both the Royal Melbourne Institute of Technology (RMIT) and the University of Queensland have instigated TQM projects in the area of student registration and induction. Many of the things that go on in universities are maintenance functions (such as accounts, personnel, and so on) so:

> it is no surprise, therefore, to find that where TQM has been applied in universities it has most often been to administrative and service departments.... Indeed, the advocates of TQM in higher education advise starting with projects in service or administrative areas because the likelihood of success is higher there. (Warren Piper, 1993, p. 98)

Institution-wide or small-scale implementation

The literature on TQM implementation in higher education, particularly from the US, strongly advises starting with projects that are of manageable size, have campus-wide visibility and impact, and promise savings. This is at variance with the total approach in industry.

However, it may be that institution managers, rather than go for a 'process that's fixable, important to customers and that can save you money' (Coate, 1990), adopt a partial approach out of caution. Often, managers are hesitant about TQM and want to pilot it in one small area before extending the process (Marchese, 1991). At Crawley College, for example, the School of Engineering was given permission to go ahead with a pilot for a quality system as a forerunner to the implementation of a College-wide quality system (Turner, 1993).

In some cases the incremental approach occurs because a small group want to demonstrate, by results, how TQM can work and thus hope to convert the rest of the institution—the 'infection model' (Seymour and Collet, 1991). At the Universities of Bradford (Porter and Oakland, 1992) and Northumbria (Prabhu and Lee, 1992) implementation began in the Business School where staff were familiar with the concept of TQM. Similarly, at an American Association in Higher Education Conference on Assessment in Higher Education, Peter Ewell advised:

> It isn't necessary to convert the entire institution before acting on what you know. In fact, I think it's dishonest. You can't really convince doubting colleagues that this will work until you've tried some things yourself and can demonstrate a successful application. As with assessment in the early days, a few good pilot projects—warts and all—are far better in convincing others that their efforts will pay off than all the rhetoric in the world. (Chaffee and Ewell, 1992, p. 16)

There is, however, little evidence to suggest that these small-scale, limited introductions lead to full-scale implementation.

The whole college 'cascade approach' (Seymour and Collet, 1991), based on centrally planned introduction, which has the full support of the senior management, is rare. Among those documented are Aston (Clayton, 1992), South Bank (Geddes, 1992; Chadwick, 1994), Oregon State (Coate, 1990, 1993), Miami-Dade Community College (Badley, 1992), Pennsylvania (Marchese, 1992a) and Fox Valley Technical College (Spanbauer, 1987, 1989).

Even where there is a total commitment to TQM, implementation in universities is not as institution-wide as it might appear. At South Bank, for example, the emphasis has initially been on the internal customer-supplier chain and the main effort has been in the development of customer-service agreements (South Bank University, 1992). At Aston, the effective introduction has been mainly in non-academic areas. The development of quality circles is an important feature of staff development for TQM and it is indicative that they have been set up to address such things as maintenance, cleaning, health and safety, communications, security, catering, finance, personnel, reprography and student care (Ager, Barnes, and Slee, 1992). Introduction of TQM in Australia and New Zealand tend also to be heavily linked to administrative functions (Jackson, 1994; Garlick, 1994)

It is not surprising that TQM implementation has been so limited and tentative. There are significant problems with introducing TQM to education, both practical and theoretical. Many of the difficulties with the application of TQM to higher education are 'generic' problems of TQM.

'Generic' problems of TQM

Despite the enthusiasm for TQM in industry, success in applying TQM is less widespread than advocates suggest. Those companies that have been successful through using TQM are widely publicised. Little or no publicity is attached to the thousands of companies who used TQM but still failed, or who abandoned TQM because it was not having any positive impact (Miller and Cangemi, 1993). Surveys of TQM users show widespread dissatisfaction, with a 'success rate of less than 30%'. Harari (1993, p. 33), for example reported that only 20–30% of TQM organisations claim to have achieved 'significant or even tangible improvement in quality, productivity, competitiveness or financial returns'. Similarly, Myers and Ashkenas (1993, p. 17) found that two-thirds of firms surveyed felt their TQM programmes were failing to have any impact.

TQM has not been transplanted easily to the service sector. For example, an extensive action-research study of implementation of TQM in the British National Health Service showed that of 38 sites undertaking quality initiatives, only two successfully implemented TQM. In conclusion the research indicated that an 'orthodox' TQM approach would be unsuitable and that a 'mixed model should be implemented.... It would allow for the particular strengths and complexities in the National Health Service which depends upon the integration of many forms of professional expertise' (Joss, Kogan and Henkel, 1994).

There are two kinds of problem identified by critics of TQM. First, criticisms that suggest the whole approach is fundamentally flawed. Second, criticisms that relate to the 'internal' failings of TQM. Much of this latter criticism relates to the emphases that different approaches place on elements of TQM. The 'fundamental' criticisms include the following.

- TQM is not customer-driven. There is no evidence, for the vast majority of TQM organisations, that individual customers specify *in advance* what is required. Even where specifications 'originate' with an 'ideal type' customer via market research the product will be 'mediated by cost, available technology, time, marketing (such as advertising) and so on' (Harvey and Green, 1993, p. 17). Priorities are not set on the basis of customer requirements, indeed, they are often not set at all (Goodman, Bargatze and Grimm, 1994).
- TQM focuses people's attention on internal processes rather than external results.
- TQM is intrinsically bureaucratic and leads to additional burdensome procedures (Hill, 1993). It tends to add new layers of organisational management rather than effect radical organisational reform. Similarly, it fails to demand new arrangements with outside organisations and changes in management compensation (Harari, 1993).
- TQM focuses on minimum standards rather than striving for high standards of excellence.
- TQM may shift the emphasis away from quality *control* but, instead, it delegates quality to specialists and experts. The notion that everyone is responsible for quality in a TQM system is a sham.

As we have seen, TQM is varied and not all commentators would necessarily agree that the above are generic problems that are fundamental to all TQM approaches.

Frequently cited 'internal' problems with TQM include the following.

- Organisations fail to achieve the required level of communication for effective TQM implementation because there is rarely a shared vision and middle managers, in an attempt to retain power, act as a communication block (Stevenson and Donnelly, 1994).
- TQM inhibits innovation and undermines entrepreneurship by standardising and routinising internal processes, leading to a formulaic approach, which is sterile and mechanistic (Harari, 1993).
- TQM fails because it lacks rigorous measurement of results (Goodman, Bargatze and Grimm, 1994).
- TQM is viewed by new users as a 'quick fix' to help them overcome their problems. The TQM literature clearly indicates that implementation is not a rapid process, that it involves a change of culture and that the impact is long-term. However, this is often overlooked by enthusiastic vendors of TQM programmes desperate to sell their wares and by purchasers who, desperate for results, think they can effect rapid implementation.
- Participation in decision making at all levels rarely takes place. Those with power wish to retain it and much decision making is merely rubber-stamping decisions of top managers (Stevenson and Donnelly, 1994).
- Too many versions of TQM fail to focus on outcomes, preferring, instead, rather more vague notions such as 'continual improvement', 'management by objectives', 'performance appraisal' or 'zero defects'.

These failings are less vehemently defended by TQM advocates as they accept that there will always be initial problems of implementation until organisational culture is changed and that some approaches to TQM have different priorities to others.

Problems of implementing TQM in higher education

Many of the problems of implementing TQM in higher education are similar to those for introducing ISO9000. These were discussed in Chapter Two and include problems of identification of customers and products and of specifying a customer-driven 'definition' of quality. However, TQM claims much more than ISO9000 and many of the issues relate to the introduction of a 'quality culture' based on an industrial model.

Customers and product—the educational experience

When discussing problems with ISO9000 in Chapter 2, attention was drawn to the particular problems of identifying the customers and products of education. This debate is taken further by commentators on TQM who suggest that any or all of the following may be seen as the *product*:

- education;
- knowledge;
- research (applied and other);
- scholarship;
- arts and culture;
- criticism of society;
- students.

Thus, the *customers* (or clients) include:

- students;
- academic disciplines;
- employers;
- funders;
- parents;
- government;
- society.

Clearly, as we have already seen, students are both product and customer, which undermines the model. Similarly, if 'critique of society' is a product the supplier-customer model breaks down because staff and students combined are suppliers of critique to society or government who are often unwilling customers and who rarely seek the product (Warren-Piper, 1993).

The plurality of the university's customer means that sometimes the products or goals of the university are in conflict. Thus universities have a role in moderating competing needs and expectations and in taking responsibility for final judgements (NBEET HEC, 1992b). This makes the application of TQM to the university enterprise a complex one. It also leads to another problem for TQM implementation. Prioritising competing needs normally requires market values in order to make a decision. Market values are not easily obtained within a university setting.

It is, therefore, not surprising that TQM in higher education has been focused on academic support services, given the relative ease with which their customers can be identified. Similarly, the institutions at the forefront of developments of TQM in higher education in the USA are the prominent research universities and the local community colleges. This may be because these institutions find it easier to articulate their mission in clear and unambiguous terms and hence it is easier to identify product and customer (Marchese, 1991). For example, the apparent success at Fox Valley Technical College may be due to it having a specific vocational focus on business quality.

Identifying student requirements

From the TQM perspective, the needs of customers must come first and should determine the quality standards the institution must satisfy. TQM derives from manufacturing where the product is usually identifiable and customer requirements in relation to the product can be established, at least within some broad parameters. Identifying the requirements of students is more difficult.

In general, there are more difficulties in applying TQM to service industries, not least because the product and the consequent needs of customers are less readily identified (Roberts, 1990; Newby, 1992). Buyers of manufactured products are disengaged from the organisation producing the product. In the service sector, the customer is less clearly separated from the product.

> As studies of TQM innovation in hotels, restaurants and even medical services have shown, the greater the personal involvement of the customer in the product ...[the greater is the difficulty] both in defining the product and in understanding customers' needs. (Warren Piper, 1993, p. 98).

Attempts to define customer needs in the service sector have focused on distinguishing the service *process* in which the 'customer' is involved and the service *outcome*. The emphasis has been not so much on fulfilling stated customer needs but attempting to measure satisfaction. Grönroos, (1984) argues that both process, which he calls functional quality, and outcome, which he calls technical quality, are important in understanding customer satisfaction with service quality.

Grönroos suggests that technical quality may be more tangible and thus easier to measure objectively while functional quality is always perceived in a 'subjective' way. However, there is some limited evidence to suggest that functional quality is more important than technical quality in influencing consumers' perceptions of service quality, at least when the technical quality of the service is at a satisfactory level.

An alternative approach to measuring customer satisfaction is premised on the idea that satisfaction with the service provided is contingent upon expectations that customers hold about the service. For example, Parasuraman, Zeithaml and Berry (1985) developed a satisfaction-of-expectations approach to service quality, which focuses on, and analyses, the gaps between expectation and satisfaction while attempting to take into account importance to the customer (Zeithaml, Parasuraman and Berry, 1990). Quality is defined as a comparison between customers' *expectations* about a service and their *perception* of actual performance. If the perceived service is considered by the consumer to match or exceed the expected service, the consumer will be satisfied with the quality. If the perceived service does not match the expected service then the consumer will be dissatisfied with the quality.

Such service-models thus circumvent the issue of identifying customer requirements substituting, instead, attempts to gauge satisfaction. This approach is problematic in education. If there are numerous types of customers (or stakeholders) then there are numerous sets of satisfactions to gauge. Even if students are taken as the primary 'customer' there are still problems with service-models in higher education.

The Student Satisfaction research at the University of Central England in Birmingham looks at 'customer' satisfaction and relates perceived satisfaction to indicators of importance (Green, 1990; Student Satisfaction Research Unit, 1991; Green *et al.*, 1994). This approach provides a simple but effective means of identifying aspects for management attention within the quality assurance cycle. However, Student Satisfaction does not attempt to relate satisfaction to expectation. In higher education, service receivers (students) are also participants and their expectations are constantly being moulded by their experience.

Furthermore, research has shown that when respondents are retrospectively asked to rate expectation, satisfaction and importance for any set of items there is a high degree of interrelation between the scales, suggesting that expectation is redefined on the basis of a *present* perspective (Harvey and Green, 1994). Unless expectations are identified at the outset and monitored as they evolve, the expectation-satisfaction gap can not be monitored.

A further problem for service-type models, which rely on customer satisfaction, is that of 'reconciling customer-responsiveness with the possession of professional expertise and power — the customer is not always right' (Holloway, 1993, p. 14). There is a sense in which this is an irreconcilable problem if students are to be regarded as customers.

Service-model approaches to TQM that focus on the gap between expectation and perceptions of service offer little by way of resolution to this problem. Do students know what they need? Mastenbroek (1991), drawing on the analogy of the service provided by a tax inspector, argues that, in general, it is difficult to devise quality evaluation criteria that are related to customer satisfaction.

Satisfaction approaches might help to identify a narrow range of 'customer' priorities and satisfactions (Bell and Shieff, 1990; Ramaseshan and Pitt, 1990) but this does not help to reconcile vague expectations with professional expertise.

In essence, TQM approaches tend to adopt a service-satisfaction approach, identifying *post hoc* satisfaction with provision, rather than any attempt at establishing student requirements in advance. For example, Cliff (1994, p. 46) argues that 'to measure quality in polytechnics adequately, we must identify the polytechnic's customers and determine how they perceive their needs. Second, we must measure the levels of satisfaction customers derive from the service'. However, his analysis addresses the issues of the 'customers' of higher education and how might 'satisfaction' be measured without addressing the identification of needs or requirements.

Customer or participant?

As we saw, when exploring ISO9000, talk of customers, of satisfying needs, of getting things right first time, and of educational products are far removed from the idea of a students as *participants* in a process of learning. Despite attempts to adapt TQM to take account of students as participants in a process of self-development, the genesis and focus of TQM fundamentally inhibits its suitability to a participatory model.

TQM is about organisational procedures designed to ensure that customer requirements are fulfilled. It is about producing an end-product consistently, or in constantly improving processes so that requirements are met as nearly as possible and as efficiently and effectively as possible. At the heart of TQM is a concept of a customer receiving a product.

Even in service-industry adaptations, the customer remains and the service becomes the product. The customer may get inside the organisation whilst receiving the service, say in a hospital, but it is still a process in which something is *done to* the customer. The satisfaction-of-expectation approach is about satisfaction with a process that the customer receives, rather than helps to construct. TQM deals with the passive recipient not the active participant in a process.

In short, TQM does not address transformation. TQM is essentially reductionist—'production or service possibilities are analysed by stages' (Warren Piper, 1993, p. 97)— it does not see the student learning experience as part of a holistic process.

The disregard for the transformative notion of education and replacement with a customer-perspective, dressed up in managerialist language (Carothers, 1992), leads many academics to regard quality systems as faddish and not worthy of being seriously engaged. In essence, TQM is about providing a product to satisfy the end-customer it is not about transforming a participant.

Uniformity or variation?

Much of the quality assurance processes in industry, and to some extent the service sector, is concerned with a consistent product or outcome. For example, Crosby's model emphasises uniformity of 'product', delivered without defects. This emphasis on consistency might be all right for mass produced components or consumer products but it entirely disregards the exploratory nature of learning. A consistency approach is, therefore, hardly commensurate with higher learning (Baldwin, 1994; Harvey, 1994b; Woodhouse, 1994).

> 'Zero defects' hold considerable potential to demotivate staff—'right first time' is difficult in product development, even when the products are new courses.... These standards may have dysfunctional effects if staff adhere to the letter rather than spirit of systems, potentially reducing flexibility and critical thinking. (Holloway, 1993, pp. 12–13)

Teaching and learning

With a few exceptions (Müller and Funnell, 1991, 1992, 1993; Walley, 1992; Hansen, 1993) discussions of the implementation of TQM in higher education are extremely reticent to discuss, let alone provide evidence of, the potential impact on the quality of the teaching and learning process. In some cases there appears to be no *intention* of linking TQM to the teaching and learning process. For example, in commenting on TQ implementation Peter Ewell clearly indicated what he regarded as an appropriate frame of reference 'every office has innumerable ways to apply TQ techniques—paper flow, how you answer the phone, how you communicate with support staff, etc.' (Chaffee and Ewell, 1992, p. 16).

In some institutions the reticence to consider TQM beyond the administrative realm is deliberate. Holloway (1993, p. 12–13) reports that at the Open University, in Britain, some academic staff involved in TQM implementation, believed 'that there is something essential about "teaching quality" which should remain outside the remit of TQM. A similar limit to the domain of TQM is reported in other HEIs in the UK and abroad, and has a parallel in medical practice'. The practice of 'starting with the 'soft targets' of support services and to ease off when the examination of internal customer-supplier chains reaches academic staff, appears to be a common experience in the UK, USA and New Zealand'.

Müller and Funnell have attempted to put the teaching and learning process at the centre of the application of TQM. They argue that the product, in vocational education and training, is the value added to the student by his or her educational experience. They suggest that the major objective of educational providers is to ensure 'that learners fully participate in, and contribute to, the learning process in such a way that they become responsible for creating, delivering and evaluating the product' (Müller and Funnell, 1991, p. 175). Using this interpretation, students play a key role as producers of their own learning. The focus is on the student as producer rather than customer, which leads to the recommendation that TQM principles should be used to develop institutions which empower teachers and students to evaluate and improve the quality of the active learning process. As we shall see, this view, which draws on aspects of TQM rather than wishing to import it wholesale, is compatible with the way the new collegiate approach responds to continuous improvement of the learning experience.

Costs and time

There is little hard evidence about the costs of implementing TQM. However, Oregon State University estimates that at least 20% of the time of people involved in projects being assisted by TQM processes is given over to the implementation of TQM itself (Coate, 1990). In health contexts it has been suggested that the financial costs of TQM implementation are quite high, for example, Brooks (1992) estimated a cost of £500,000 over three years for a hospital with 2000 staff.

Seymour (1991) suggests that, although it is too early to tell, there is a cost-benefit trade-off at the project-level where the implementation has met with more success than when implemented institution-wide. This raises questions, though, of how, for example, is the 'price of non-conformance', such as a cancelled lecture, determined? Is it possible to quantify 'good quality tuition' in financial terms?

For staff, the real obstacle, even if they are inclined towards TQM, is one of time. The pressure on staff from increased student numbers and a declining unit of resource is leading towards a culture of 'getting by', let alone embracing irrelevant activities that eat in to their time (Yorke, 1993, p. 6). Quality systems are seen as increasing work loads and administrative burdens on teachers who are already expected to do more.

Furthermore, the benefits of TQM are not immediately apparent, there is a long time-lag of three to ten years between initiation and expected benefits from full implementation (Coate, 1990; Schofield *et al.*, 1991; Clayton, 1992).

Staff resistance

Scepticism and cynicism flourish amongst academics who tend to be more conservative than radical in their view of the higher education process. This cynicism is accentuated by a distaste for the evangelicalism associated with TQM (Baldwin, 1994).

Often, in practice resistance is underestimated and necessary groundwork has not always been done to gain assent and sustained support from staff (Yorke, 1993). Nor can this cynicism be ignored because there will be tension between TQM practitioners and non-practitioners in the same institution. In addition, extensive cynicism will make it difficult to achieve a 'critical mass' to support the institutionalisation of TQM and get beneath surface-level applications (Seymour, 1991). It also reduces the potential for developing teamwork, consensus-building and conflict resolution, all of which are vital elements of TQM implementation and difficult enough to achieve in an academic environment at the best of times.

Staff resistance to TQM is significant and takes a number of forms: suspicion of management motives and of external systems and experts; resentment at being blamed for failings in the system; and lack of trust.

Management motives

The concern that ISO9000 is a managerialist tool to undermine academic autonomy also applies to TQM. Many staff are resistant because they see TQM as another ploy that increases managerial control.

> Suspicion of management motives behind the adoption of TQM may sometimes be justified. TQM has been accused of being exploitative, placing the blame for the weaknesses of management and organisational systems on their victims, the less powerful group of employees. (Holloway, 1993, pp. 5–6)

Watkins (1993, p. 13), similarly, notes objections to increasing managerial control as a result of TQM implementation in higher education:

> TQM...does not necessarily lead to greater autonomy. Rather the result is that employees are asked to perform an increasing number of tasks which are, in turn, closely monitored and strictly controlled. The characteristics of TQM regimes is the extension of management control with work intensified through heightened surveillance, accountability, peer pressure and waste elimination.

However, in ironic contrast to employee resistance, a lack of wholehearted support often reflects the concern of managers that TQM would lead to a loss of managerial control (Seymour, 1991; Harvey, 1993b). Managers are suspicious of their changed relationships to staff and this in turn leads to a somewhat sceptical view by staff of the advocated virtues of what might turn out to be 'no more than a passing fad' (Yorke, 1993, p. 6). Inconsistencies in leadership support lead to a cynicism about the value of the entire process.

Resentment

There is resentment at the inference that the failings of the institution, brought about by inadequate or inappropriate allocation of resources, are being blamed on staff. Teaching staff at Crawley College, for example, 'were very sensitive about any implications that they were not giving a quality service already' (Turner, 1993, p. 20); a point echoed by library staff at the University of Western Sydney (Stevenson and Donnelly, 1994).

Failure of trust

For many academics, the introduction of any quality system implies a criticism of the quality of their work hitherto and a lack of trust in the work force. These concerns are not allayed by the emphasis placed, by many versions of TQM, on the need to place trust in the workers to fulfil their responsibilities.

Distrust of management and a feeling that management distrust workers contradicts, in practice, the good intentions of those who, perhaps naively, see TQM as democratic process.

> People today want increasingly to be consulted; to feel part of the decision-making process at work; to feel more valued and trusted; want to be "in the know" to their level of inclination. TQM is ideal for use in educational enterprises which are people intensive. It gets away from *ad hoc* methods of consultation and involvement, by building a system for improvement in the long haul. (Lynch, 1994, p. 175)

The TQM solution to resistance is to place emphasis on the leaders within the organisation to identify and name resistance and to facilitate change by creating a dialogue about the likely outcomes should resistance continue (Mink, 1991). It is precisely this mix of cajoling and threat that many academics find abhorrent about TQM and which lies at the root of the failure of trust.

Increased bureaucracy and burden of work

Quality management is sometimes seen, justifiably, as resulting in increased layers of management, not flatter organisational structures. At Crawley College, for example, the pilot introduction of TQM did not proceed smoothly as there was considerable resistance to what amounted to the introduction of an additional layer of middle managers, who among other things, 'have responsibility for driving the quality initiative in their area' (Turner, 1993, p. 29).

TQM, it is claimed, ought to work better in semi-autonomous situations because it is based on mobilising organisational culture rather than a reliance on bureaucratic procedures (Drucker, 1991; Tannock, 1991a). However, TQM leads to major gains in effectiveness and cost savings when 'cross-cutting functions' are addressed, for example, enrolments management, where central administrative processing is linked to academic decision-making about student admissions. However, cross-functional change tends to be difficult in a collegiate ethos of semi-autonomous units.

Implementing TQM is also seen to involve an intolerable and unnecessary burden of work with no discernible pay-off in the academic context.

Team working

TQM places considerable emphasis on working in teams. In many respects this is an alien process for many academics who are not only used to working alone but are valued by their institutions for their individual contribution. Team working, traditionally, has been a restricted activity for academics, limited to some larger research projects, to course-scheme design for externally accredited courses (such as by awarding, professional or regulatory bodies) and team-teaching. For most academics, individual teaching and scholarship are the norm. Indeed, there is a conflict between teamwork and individual brilliance.

It is not surprising that, in higher education settings, TQM is introduced into areas where team-working already exists and where the team has a fairly straightforward task. However, some reports suggest that TQM, in such circumstances can do more harm than good by threatening the existing team-working processes.

For example, the University of Western Sydney introduced a pilot TQM into the Collection Services Department of its Library with a view to examining the processing and turnaround time for book purchasing. Senior managers were aware of the resentment and scepticism that TQM could generate but, even forewarned, were unable to allay the problems caused by the external facilitator.

> There was a feeling of disquiet with the external TQM facilitator in that some staff felt his zeal and commitment to TQM tended to negate other management tools and practices. The jargon or language presented a problem to some staff. In addition, even though the work group had been working quite well as a team, there were problems with group dynamics, particularly in relation to the roles of the facilitator and the group leader. The group settled down considerably once the facilitator began to leave the group to manage itself. (Stevenson and Donnelly, 1994, p. 7)

The introduction of TQM in this case almost destroyed a process that was already underway and it was only with the ejection of the TQM facilitator from the group that the team was able to return to an effective way of working. A similar situation was reported at Oregon State University Library where staff were resentful of TQM because they already used participative problem-solving (Butcher, 1993). Again, in this case, the TQM trainer nearly caused disaster.

Measurement and statistical procedures

A major area of resistance is the measurement of quality in higher education. Given the diversity of customers and products there is little agreement about suitable quantitative benchmarks. Some staff are suspicious of statistical focus of TQM, 'since they feel it will tend to introduce an inappropriate levelling of healthy diversity ' (Warren Piper, 1993, p. 91). This reflects the protracted debate about the appropriateness and nature of performance indicators in higher education (CVCP/UGC, 1986, 1987; AVCC/ACDP, 1988; McVicar, 1989; Dochy *et al.*, 1990a; Goedegebuure *et al.*, 1990a; Head, 1990; HMI, 1990; Johnes and Taylor, 1990; Roberts, 1990; Cave *et al.*, 1991; Yorke, 1991, 1995; Burrows, Harvey and Green, 1992a; PCFC, 1992).

Thus, the emphasis placed on statistical procedures by some approaches to TQM acts as much as a major demotivator for some staff as 'managerialist jargon' (QUT, 1990). For others, however, the statistics are opposed on the ground that they are inadequate or irrelevant to the quality monitoring or improvement processes. For example, the first attempt to introduce TQM in the Science Faculty at Queensland University of Technology overemphasised statistics. The attempt was abandoned as heads and deans who were the subject of the attempted TQM-implementation were insulted by the disregard for their own level of expertise in statistics. They regarded statistics as irrelevant to their quality concerns—they could critique statistical approaches from a position of considerable knowledge of the limitations of such techniques (QUT , 1990).

Repackaging

There is a tendency among TQM enthusiasts to repackage a range of research and management procedures as their own, and to 'ascribe all improvements, however initiated, to TQM' (Woodhouse, 1994).

For example, there are a growing number of commentators offering advice when introducing TQM into a service environment (Saraph *et al.*, 1989; Holmes, 1991; Schofield *et al.*, 1991; Binney, 1992; Coulson-Thomas, 1992; Zairi, 1992; Garvin, 1983; Kaluzny *et al.*, 1993). Important features of successful implementation of TQM in the service sector that emerge from these include:

- a passion about quality;
- a belief in people and their potential;

- building on current good practice;
- flat organisational structures;
- commitment of leaders and key stakeholders;
- simple informal communication systems that enable sensitive information to be widely shared and encourage staff involvement;
- use of a TQM co-ordinator and multi-disciplinary steering committee;
- genuine commitment to listen to employees and respond rapidly to their comments;
- stability of the organisation, notably in relation to centralised decision making;
- integration of quality systems with management decision-making processes;
- availability of slack resources and a coherent and responsive plan for resource utilisation;
- establishment of specialist and general skills training;
- minimising perceived threats to power bases;
- receptive organisational climate;
- identifying desirable and realisable objectives thus focusing on groups where implementation is likely to be most successful.

The question arises as to whether this list of 'critical success factors' are unique to TQM. 'They may be just as relevant to strategic planning, organisational development or human resource management' (Holloway, 1993, p. 9).

Similarly, market research tools such as customer-satisfaction surveys are being claimed as TQM approaches (Cliff, 1994). Indeed, a whole gamut of basic social research techniques are repackaged as TQM techniques. Juran (1988, p. 210), for example, suggests that TQM involves 'planned, systematic collection of data on multiple process variables and the associated product results. The data are then systematically analysed to establish the relationships'. This is nothing more than multivariate analysis: for 'process variables' read 'independent variable' and for 'product results' read 'dependent variable'.

Similarly, in an education setting, Jackson (1994) repackages simple social research when claiming that monitoring the teaching of quantitative subjects in non-quantitative degrees at La Trobe University involves using 'TQM techniques':

> The technique involves development of a longitudinal database, where data is collected over time, to gain a greater understanding of the process, which is the subject, and the relationship between its inputs and its outputs. With a better understanding of the process and identification of problems within it, it will be possible to take actions to improve the process and hence, hopefully, the outcomes.... Taking the introductory statistics subject as the process to which students are subjected and viewing the students as both inputs and outputs, the longitudinal database is used to collect data upon process variables (student characteristics) and product results (performance in subject). (Jackson, 1994, pp. 89–91)

Closer analysis shows that this is nothing more than standard longitudinal action research, based on multivariate analysis.

However, the repackaging does suggests three respects in which TQM differs from most social research. First, TQM is much more clearly reductionist. Although some forms of positivist social research use reductionist, system models to identify key factors in a process, this is rarely as clear cut as the system-analysis model underpinning much of TQM.

Second, TQM makes clearer links between research and action than much conventional social research, which tends to be hesitant about the politics of informing policy or specifying action. However, critical research has never had a problem in identifying the political implications of its work (Lynd, 1939; Mills, 1959; Habermas, 1970; Harvey, 1990). Similarly, social policy research, action research and evaluation research all have clear agendas that link research findings to recommendations for action (Ben-Tovim, Gabriel, Law and Stredder, 1986).

Third, TQM makes much of the transformation of data into actionable information. This is a difference of focus. Social research transforms data into evidence in developing a deeper theoretical understanding of an issue. TQM is more restrictive in its focus and requires only that data is processed into *management information*. This reflects the managerialist concerns of TQM rather than a deeper understanding of social processes. However, one should avoid assuming that the production of management information is itself a 'TQM technique'.

The claim that all improvements in education are due to TQM extends to a range of standard practices as diverse as periodic review of courses, monitoring of student assessment turnaround, team development of new courses, devising student coursework assessment criteria, end-of session summary feedback procedures, as well a host of other teaching and learning 'innovations' and staff development processes (Lozier and Teeter, 1994).

Repackaging an old product does not make it a new product. However, as in the case of TQM, it can be marketed as something new. It might be argued that TQM is predatory and nothing more than an assemblage of good management practices, statistical procedures and common-sense underpinned by a simplistic philosophy designed to spread the responsibility for quality outcomes (Holloway, 1993, p. 2).

Repackaging is an attempt to give TQM a legitimacy and it has facilitated the resale of old ideas. The more it attempts to infiltrate realms it was not designed for the more the predatory and eclectic nature of TQM is revealed. In higher education, TQM has nothing new to offer other than reminding us of established procedures and responsibilities.

Conclusion

It appears that there is a lot of effort, energy and resources expended on inaugurating TQM and related systems but little evidence that have any major impact across the higher education system nor that they deliver any improvement at the staff-student interface. There are innumerable bullet-point papers that provides lists things to do when setting up TQM systems but very few that critically evaluate the potential, let alone actual, impact of such systems in higher education. There is not much to suggest that TQM is other than yet another passing fad:

> We have experienced a string of fads proclaiming the same institutional success including Statistical Process Control, Long-Range Planning, Strategic Planning, Management by Objectives, Zero-Based Budgeting, O & M (Organisation and Methods) Theory 'Z', Theory 'K', Job Enrichment, the energetic Management-by-Walking-About, the Management Audit, Value-Added Planning, Work-Place Reform and the various other theories through which scholars and practitioners have earned their fame, their theses, their MBAs and their consultancy fees. (Hinchcliffe, 1994, pp. 161-2)

There is no overwhelming evidence that, in the higher education context, TQM does you good. This does not mean that those institutions who have embraced TQM are wrong. Some institutions have doubtless benefited from the adoption of TQM. Most, it appears, are sceptical. TQM is certainly not an option an institution should take just because it may have been of some use somewhere else. It is essential to evaluate the potential benefits carefully and estimate costs of all kinds before embarking on what might be an unnecessary voyage. Indeed, what may accrue to higher education from TQM might be much more readily and effectively gained by encouraging the new collegialism.

There is no compelling evidence that TQM will become a major aspect of quality monitoring and development in higher education. Indeed, interest in its potential is already beginning to wane, judging by contributions to major national and international conferences, seminars and colloquia. Two years ago parallel sessions on TQM in education used to attract far more than the average number of respondents. For example, at the *QHE* 24-Hour seminar in January 1993 the TQM-related session was by far the most popular. Anecdotal evidence suggests that TQM-related sessions are now seen as somewhat passé. Indicative of this is the cancellation of the first national conference on TQM in higher education due to have taken place in Britain in early 1995.

Part of the reason for declining interest appears to be that the debate about TQM in education has not progressed. TQM gurus are saying the same things and not relating sufficiently closely to the educational context. TQM sessions are characterised by continuing sterile discussions about clients, customers and products as well as constantly reiterated fears about TQM as a managerialist tool. Disaffection is creeping in rapidly because of the evident failure of TQM to have anything meaningful or useful to contribute to the staff-student learning interface. The contribution tends to be in terms of specifying service standards, such as turnaround time for student work, which are now covered by institutional student charters.

Chapter 4
THE NEW COLLEGIALISM

The new collegialism is the radical alternative to the cloisterism of the traditional collegiate approach. As was suggested in Chapter 1, academic cloisterism is inward-looking, individualistic, self-serving and self-regulating, characterised by esoteric knowledge and opacity. The new collegialism is outward looking and responsive, emphasises professional accountability and team-working. It is learning-oriented and transparent. The new collegialism emphasises continuous improvement within the existing academic framework (see Table 1).

New collegialism and cloisterism represent ends of a spectrum of positions and approaches to academia. Both tendencies can be found in most higher education institutions and in most discipline areas.

The growing requirement for accountability and the consequent increase in external quality monitoring has encouraged the development of the new collegialism. Academics at both ends of the spectrum have equated quality monitoring with the growth of managerialism. This has led to widespread cynicism, resentment and lack of trust amongst some academics. One reaction has been further retrenchment and reification of cloisterism through increased demands for academic freedom (McConkey, 1995), calls to maintain an élite set of institutions (Hughes, 1994; THES, 1994) or the concentration of research monies in 'established' institutions (Wojtas, 1994).

An alternative reaction has been to grasp the initiative and reassess traditional collegiate allegiances and prerogatives. Instead of single-minded focus on the discipline (or profession) and their place within it, new collegiate academics are openly addressing the interests of various 'stakeholders' in the education process—not least students (Harvey, Burrows and Green, 1992; Barnett, 1992a; 1994; Roper, 1993; Haselgrove, 1994).

Academic autonomy in the new-collegiate approach comes through ownership of the quality-improvement process and the development of an explicit professionalism (Rear, 1994a, 1994b; Elton, 1992, 1993; Warren Piper, 1994).

The reassessment of traditional collegiate priorities, embodied in the new collegialism, includes an acceptance of a widened set of responsibilities. This is evident in the growing transparency of practices and procedures within higher education (HEQC, 1994; Porter, 1994).

The emphasis, in teaching and learning, is on facilitating active learning through clear identification of aims and outcomes within an integrated approach that links objectives, content, teaching practices, assessment and student attainment (Barnett, 1992b; Race, 1993; Brown and Knight, 1994; Harvey, 1993c; McDowell, 1994). Greater emphasis is being placed on team work to ensure the coherence of the student experience.

Table 1: Comparison of cloisterism and new collegialism

Cloisterism	***New collegialism***
Secretive	Open
Isolationist	Networking
Individual	Team work
Defensive	Responsive
Traditional approach	Innovative
Producer-oriented	Participant-oriented
Clings to power	Empowering
Wary of change	Welcomes change
Elitist	Open access
Implicit quality criteria	Explicit quality criteria
Information provider	Facilitates active learning

For example, North East Wales Institute (NEWI, 1994a, 1994b, 1994c) is developing a responsive collegiate approach. Their quality framework emphasises team working:

> The Academic Quality Unit believes that the most effective quality assurance systems devolve responsibility to those involved with modular courses. Course teams have responsibility for the quality and delivery of their own work. Members of the Quality Assurance Group, in revising procedures for review and evaluation, have borne in mind two things: firstly, the need to devise a system which respects the various practices, procedures and cultures which currently exist across the Institute, and is responsive to the demands which come from outside the institution; secondly, any system or framework has to have the support of course teams and to be seen to be of benefit. With this in mind the *Course Team Quality File* and the materials contained in it have been developed to enable course teams to use monitoring and evaluation as tools for: *improving effectiveness* by establishing priorities, setting targets and taking stock of outcomes and progress; *improving process* by using materials in the *Course Team Quality File* for the purpose of reviewing and improving the processes of teaching and learning; *learning* by encouraging the notion of a 'learning community' which is committed to increasing knowledge and understanding by engaging in teaching and research; encouraging ownership and ensuring that this is retained by course teams who are able to make their own professional judgements on data collection, analysis and interpretation of matters relating to service standards and improvement methodology. (NEWI, 1994a, p. 1)

Teaching is no longer only seen as something that happens in private between consenting adults (Warren Piper, 1994). Dialogue and discussion have traditionally been the hallmarks of research in the collegiate setting and this is being reasserted in response to the competitive pressures being placed on individuals through various forms of research output assessment that can be found throughout the world.

Continuous quality improvement is a key feature of new collegialism. It is an integral part of the culture of quality that underpins self-critical reflection and the acceptance of responsibility for quality development. The cloisterist approach questions the 'philosophy' of continuous improvement as it implies that there is something wrong with what is being provided or produced. The new-collegiate approach sees continuous improvement as a dynamic force that meshes in with procedures of innovation and change at the heart of the academic process. In this respect, new collegialism parallels elements of some forms of TQM—delegated responsibility for quality and the never-ending goal of quality improvement.

One of the key benefits of ISO9000 registration was believed to be the development of consensus and explicit collegiate consciousness. Similarly, some commentators have suggested that TQM is compatible with a collegiate approach (Tannock, 1991a; Holloway, 1993).

> On the face of it TQM has characteristics which would fit in well with the ethos of a university. To start with, people themselves are responsible for the quality of their own work. Instead of there being some inspectorate, or a senior manager making judgement, a system is created whereby everybody is given evidence about the effect of their own decisions and standards of work. They are left to react in whatever way they think fit. The main incentive for improvement is an individual's own self-respect. A commitment to high standards is maintained through the social pressure of working with colleagues who are jointly committed to a high quality product or service. The responsibility of senior staff is the creation and maintenance of a culture in which quality is recognised and prized, rather than the monitoring and evaluation of individual performance. This is very much as professionals in general and academics in particular expect to work. (Warren Piper, 1993, pp. 97–8)

But who does the 'giving of evidence' of effectiveness? Who decides on criteria of effectiveness and for what purpose? Who decides on standards, and for what purpose? What is the high quality product? Who determines the level of responsibility of workers, and for what ends? How is the quality culture created and maintained?

The scepticism of academics about TQM is that it endorses, reinforces and legitimates the role of managers rather than places real ownership and control in the hands of practitioners. It is still a top-down rather than bottom-up approach (Bauer, and Franke-Wikberg, 1993; Harvey, 1994b). And although it should be amenable to bottom-up control there is no evidence anywhere of TQM approaches taking the ultimate logical step—the withering away of the management structure. Managers, as we have seen, are hesitant about changed roles that may occur with TQM implementation.

The rise of managerialism in higher education has resulted in a significant erosion of respect and trust (Yorke, 1992; Trow, 1993; Daniel, 1994) and we have seen that, despite assertions to the contrary, academics view the implementation of quality systems as further undermining rather than restoring trust.

The jargon, statistics and evangelicalism associated with TQM have little resonance for academics. In the USA, even where there is interest in TQM, there is a shift towards different nomenclature. The preference amongst academics is for the term CQI (continuous quality improvement) rather than TQM.

> Use of "CQI" is more than a reaction to TQM's fixation on "total" and "management"; it's a signal that campuses have more to learn from the knowledge industries that have pursued quality before us (research labs, hospital centers, etc.) than from industrial analogs often brought forward on behalf of TQM. (Marchese, 1992b)

The new collegialism is not so much concerned with elaborate systems as with effective action at both the teacher-learner interface and in terms of research productivity. In relation to the pedagogic function, the new collegialism sets the fragmentary teacher-learner interaction within a broader conception of the total student experience of learning.

Total student experience of learning

There is a growing awareness that higher education needs to overtly address the learning process. Student learning takes place in a much wider context than the confines of the class-room. It is therefore important to locate any quality monitoring of higher education's teaching and learning processes within the totality of the student learning experience (Harvey, Burrows and Green, 1992; HEFCE, 1993).

This view is predicated upon the assumption that students are participants in a process rather than either an end-product in themselves, or customers of an end-product (which might be a programme of study or 'knowledge and skills'), or a client receiving some form of educational service.

In short, TQM and ISO9000 place emphasis on 'pragmatic' definitions of quality—fitness for purpose, zero defects, right first time—that presuppose identifiable customers, disengaged from the productive process, who are able to specify requirements or desires. New collegialism returns to first principles of quality and defines it in terms of a transformative process. Quality is viewed as a process of transformation from one state to another, not a static product or outcome. In that sense, students are transformed by the educational process in which they participate (Harvey and Green, 1993; Barnett, 1994).

The transformative approach subsumes other notions of quality, such as perfection, high standards, fitness for purpose and value for money. These are possible operationalisations of the transformative process. [3] They are not ends in themselves (Harvey, 1993c). The core of the transformative approach is the enhancement and empowerment of students (Harvey and Burrows, 1992).

TQM and ISO9000 are about providing a product for an end-customer rather than concerned with transforming a participant in a process. It is thus philosophically at variance with the essence of higher education (both in terms of teaching and learning and the development of new knowledge). This is the fundamental reason why TQM and ISO9000 have failed to catch on in higher education and will fade and die. It is why CQI is a more readily acceptable notion in higher education—at least superficially, 'improvement' can be linked to a notion of transformation whereas 'management' conjures up images of control. The new collegialism not only foregrounds transformation but has also taken the quality message seriously and has absorbed the useful reminders about responsive quality systems and practices.

The new-collegiate approach requires a focus on the outcomes of higher education as well as the process. Learning outcomes include *knowledge acquisition* and the *critical application* of knowledge in a variety of contexts—which requires the development of various '*skills*'.

The enhancement of the total student experience requires three things: transparency, integration, and dialogue (Harvey, 1994b). *Transparency* means being explicit, clear and open about the aims of the programme, the process of teaching and learning, the mode and criteria for assessing students, and the intended attainment of students.

Integration requires that these elements are linked together into a cohesive whole so that the aims are reflected in the transformative outcomes and the teaching/learning and assessment process works explicitly towards enhancing and empowering students.

Dialogue involves discussions with learners about the nature, scope and style of their learning. For example, discussing the relevance of knowledge and skills; agreeing on appropriate and meaningful assessments; exploring suitable teaching and learning approaches; and so on. Dialogue also requires teachers to talk with each other about the teaching and learning process and opening it up to debate, innovation and scrutiny.

Transparency, integration and dialogue go to the heart of the traditional process and challenge the locus of power in higher education. Such notions are not universally popular. Some academics are very sceptical about transparency because they say it makes the educational process too prescriptive. It also presupposes that students are equally able to apply criteria for learning. There is, for example, a concern that transparency will lead to challenges to academic integrity and consequent grade inflation, as is widely reported as occurring in the United States. Similar concerns about grade-inflation have already been expressed in Britain (e.g., Embley, 1995). The issue, though, is not that grade inflation occurs but that it is the result of greater transparency. On the contrary, if there are clearly identified, explicit criteria for assessed work then it is easier for arbitration of contended grades than if criteria are implicit. The cloisterist solution is to retreat into opacity, claiming that only the initiated (the lecturer) is in a position to recognise the worth of a piece of assessed work. The new-collegiate approach encourages the application of explicit criteria to assessed work.

Similarly, the new collegiate approach considers integration as an explicit part of the teaching and learning process. Opponents of this view consider that part of the intellectual work undertaken by students is to develop their own understanding of the relationships between different elements of their learning. In a sense, this would not be disputed by a new-collegiate approach provided the programme of learning is self-evidently coherent and the outcomes clearly specified. The problem arises when there is no coherence or explicit outcomes.

More fundamentally, the issue is not one of whether students are able to make links across blocks of knowledge but whether the whole programme of study is structured in an integrated way. Whether the aims, content and assessment are integrated, whether the teaching relates to them and whether the student attainments are explicitly linked to this vertically integrated process. The new-collegiate approach would not suggest that students should do the intellectual work of integration in order to obviate the need to provide a coherent and interlinked programme of study.

Finally, the thought of meaningful dialogue with students, rather than instruction, is also an alien notion in some areas. To suggest that students should be involved in negotiating programme contents, modes of assessment, outcomes, assessment criteria and so on is seen as untenable at the cloisterist end of the spectrum. Dialogue of this type is seen as giving students too much power. It assumes that students are in a position to know what is best for them. The new-collegiate approach, taking seriously the view that students are participants in a process of enhancement and empowerment, finds no contradiction in including students in a dialogue (School of Independent Studies, 1991; Tait, 1995).

The new-collegiate approach thus includes students in the development of the teaching and learning process. This requires that students also adopt a responsive approach, that they adopt a developmental rather than instrumental, credentialist approach to their learning. Students are often conservative and unwilling to take responsibility for their own learning. Unless students engage actively in the learning process and are prepared to accept responsibility for the quality of their learning, they act as a drag on new-collegiate responsiveness.

External quality monitoring and the new collegialism

Part of the responsiveness of higher education must, at least in the medium term, involve a recognition of an obligation to external quality monitoring processes. Thus the development of a quality approach within higher education cannot be considered solely in terms of internal management processes. Higher education must address its responsibilities to the wider community, including taxpayers and government, through its quality procedures. As has already been suggested, neither ISO9000 nor TQM are effective in higher education and neither interact well with external quality monitoring processes. What is required is an internal quality approach that meshes with external accountability requirements.

However, this raises key issues about the relationship between quality improvement and accountability, which must be addressed at the system, as well as the institutional level (Sanders, 1994; Vroeijenstijn, 1994; Brown, 1995). The development of the new collegialism is central to the resolution of the tension between accountability and quality improvement.

The new-collegiate approach emphasises the development of a quality culture of continuous improvement. A necessary element of this process is a self-critical collegiate group, prepared to set their own agenda for improvement and to ensure action to fulfil quality commitments. Most accountability-led external monitoring deters a self-critical approach and encourages compliance (van Vught, 1991). This makes it difficult for a culture of continuous quality improvement to flourish in a climate dominated by external accountability.

The question is how does a new-collegiate approach, which endorses transformative, empowering education, driven by a responsive collegiate group, relate to accountability-driven, external, quality monitoring?

Continuous quality improvement, sees quality in terms of a process of transformation. The accountability-led view sees improvement as a secondary function of the monitoring process. The assumption is that improvement will take place as a result of becoming accountable (Commonwealth of Australia, 1991; DES, 1991; NGA, 1991; H.M. Government, 1992). Available research (e.g., Westerheijden, Brennan and Maassen, 1994) and anecdotal evidence (e.g., Murray, 1994) suggests that accountability approaches may encourage initial improvement (where accountability requires the production of strategic plans, clear objectives, quality assurance systems, and so on) but have no lasting impact in terms of continuous improvement.

> The word "quality" was on the lips of the majority of administrators and academics in higher education at the time of the reviews [in Australia], but this seems to have subsided, at least until the next review which is to take place in 1994. (Calway and Murphy, 1994)

In terms of the model (Table 1) external monitoring aimed primarily at *accountability* will effect improvement at one end of the spectrum but is likely to act as an inhibitor at the other end. Cloisterism may be disturbed by requirements that clear aims and objectives are made explicit, that the coherence of a student's programme of study is carefully considered, and that procedures for assessing student progress are transparent. External monitoring, by requiring these accountable procedures, may produce a sufficient initial impetus to shift an academic group from a cloisterist mode of operation to a responsive mode. The problem is that once the shift has occurred, there is little in external accountability models to ensure a continued process of improvement. Indeed, having to continuously respond to accountability requirements may lead to a reduction in the time and energy invested in innovation and improvement.

A *continuous* process of quality improvement shifts the primary emphasis on quality from external scrutiny to internal effective action (Bauer and Franke-Wikberg, 1993). In terms of teaching and learning this means devising a quality system that drives improvement from the *staff-student interface*, which is precisely what is embodies in the new-collegiate approach. The problem is that the quality-improvement approach must also mesh with external requirements for accountability.

What is involved is to respond to top-down accountability-led monitoring through a process of bottom-up continuous quality improvement. In a sense, this means that initiative must be grasped via the internal initiatives. This will only be feasible with an academic body that is prepared to adopt new-collegiate principles of responsiveness. A cloisterist approach hands the initiative to external bodies. A new-collegiate approach grasps the initiative and demonstrates that accountability is achieved through a process of continuous quality improvement.

A possible approach would involve the development of operational teams, who take responsibility for quality, set their own agendas for action, report their intentions, actions and consequent achievements. The process would be internally audited and the cumulative product reported by the institution, in an annual quality report, to an appropriate external body. The external body would, as appropriate, arrange a periodic audit of the institutional quality reports, through whatever device (such as peer review) that it deemed necessary, to validate the veracity of the quality document. It would operate in principle, in a similar way to the audit of the financial accounts (Harvey, 1994b; 1995).

The new-collegiate approach reverses the view that accountability will lead to quality improvement. The new-collegiate approach prioritises a dynamic quality monitoring process linked to effective action. In so doing it ensures that accountability will inevitably follow from the process of continuous quality improvement. Furthermore, accountability will be achieved at reduced cost, through a reduced burden on the institution and less aggravation and hostility from staff. There will be an increased pay-off in terms of quality improvement than would arise from a compliant culture located in the hostile, conflict-ridden and suspicion-laden environment that characterises a cloisterist reaction to accountability-led external monitoring.

In summary:

> the improvement-led approach of the new collegialism involves both a 'bottom-up' and 'top-down' approach embedded in a quality-improvement culture. That culture rests on a new professionalism that is prepared to address issues beyond the mysteries of the academic discipline. It requires a commitment to open, transparent ways of working and the grasping of the responsibility for quality which it is prepared to address overtly and publicly (Harvey, 1995).

Conclusion

Some institutions in the United Kingdom, the United States of America and Australasia are in the early stages of implementing quality assurance systems based on ISO9000 or TQM (Cowles and Gilbreath, 1992).

There are problems in implementing these approaches, which relate to the limited scope of the definitions of quality; identification of what is the product and who are the customers; defining organisational objectives with clarity; measuring and controlling processes related to teaching and learning; and exploring the role students play in their own learning. There is a danger that the importance given to measuring processes in both approaches may lead to an over-emphasis on aspects of higher education which are easily measurable at the expense of other areas.

There are some advantages in using these systems. ISO9000 is an internationally recognised system that has credibility, particularly in the eyes of employers. Using customer-driven definitions of quality emphasises the viewpoint of students and employers rather than the viewpoint of the provider. TQM, in particular, requires recognition that everyone in an organisation has a role to play in improving quality. It can, therefore, be used to look at the quality of the whole organisation, not just the quality of courses.

Although the application of TQM to higher education is in its early stages there is little indication that TQM has had any impact on, let alone improved, quality at the teaching and learning interface. Similarly, TQM is 'likely to have nothing *directly* to say about the creativity involved in research' (Warren Piper, 1993, p. 100).

The *supposed* benefits of TQM to higher education include involvement of staff in the improvement of their own working environment; a clearer idea of what the organisation is about and the individual's role in this; the institution's ability to be responsible and accountable for the services it provides; a shift of priorities from policy and rule-generation to learning about customer expectations and requirements; improved morale and changed attitudes; intuition and tradition replaced by fact-based decisions; breaking down interdepartmental divisions through teamwork and the development of a common-language to solve problems (although one better suited to higher education than the existing business-oriented language of TQM) (Seymour, 1991).

There is nothing here that the new collegialism does not embrace. Parallels between new collegialism and aspects of some forms of TQM have been highlighted. However, they are fundamentally different despite some common ground, such as delegated responsibility for quality, team working and the culture of quality improvement. At root, TQM is fixated on a product or service supplied to a customer (or client). Higher education is a participative process. There is no simple, discernible end-product of higher education, it is an ongoing transformative process that continues to make an impact long after any formal programme of study has been completed. In essence, TQM addresses a partial 'pragmatic' notion of quality that is of marginal use in the context of higher learning and knowledge development. The new collegialism adopts a transformative notion of quality that embraces process and change rather than adherence to a static specification of a product.

Effort might be more profitably directed to encouraging the development of open, self-reflective collegialism rather than the importation of expensive, bureaucratic, unwieldy, alienating managerialist approaches from industry. In essence, TQM and ISO9000 miss the mark, having little to offer in relation to the teaching and learning interface, not least because neither can accommodate the notion of the active participant in learning. The way forward for continuous quality improvement in higher education is through the new collegialism.

ENDNOTES

1 Managerialism refers to the tendency in higher education for professional managers to play a much more significant role in decision-making in higher education. Decision-making that has a profound impact on academic processes and quality but which is based on non-academic criteria — often financial criteria or as the result of managerial theory or fashion (Miller, 1994). Finance is raised from the status of a parameter within which to work to the guiding operating principle. Accounting procedures dominate decision-making and financial arguments are used to manipulate political aims (Wilkins, 1994).

The rise of managerialism involves a shift towards a more formalised management structure and control at the institutional level which is reflected in more direct management of the higher education system by the government (Holmes, 1993; Trow, 1993; Miller, 1994).

John Wilkins (1994) argues that higher education is faced with the emergence of unelected oligarchic managerial élites, which wield great power without accountability either externally or internally. The widely publicised events in Britain relating to the vice-chancellors at the universities of Huddersfield and Portsmouth are taken as the tip of an iceberg by proponents of this view.

> Externally, provided they balance their books they are unlikely to be challenged. Internally, in the name of 'effective management', senates and academic boards are being stripped of any worthwhile powers and greatly reduced in their breadth of representation. Governing councils provide little effective check. Appointed members owe too much to the patronage of the élite who put them there, while elected representation is reduced.... I do not deny the possibility of benign oligarchies and dictators. I would prefer not to be forced to rely on it. (Wilkins, 1994)

It is the unelected and unaccountable feature of managerialism and the priority it gives finance that represents the core distinction from collegialism, which emphasises the academic and social.

In Britain, this managerialist tendency first appeared in the former polytechnic sector. Following the incorporation of the then polytechnics there was a centralising of control and an erosion of the contribution of academics to institutional policy-making and 'a sense of alienation from senior management began to manifest itself' (Yorke, 1993, p. 5). It has subsequently spread into the traditional university sector. Managerialism at the level of the state, is manifest in the direct interference in higher education, in the name of accountability, by the government and its agencies such as the funding council (Trow, 1993).

John Rear (1994a, 1994b) disagrees that managerialism is threatening academic freedom. On the contrary, 'good management of the universities is essential as a defence against further erosion of their autonomy.... For the good of all the academic departments and for the job security of their staff, the universities need to be managed by people who understand and respect academic values but who have not only the time and expertise but the interest to do it well; who do not just see management as a regrettable distraction from their real work; and who are willing to immerse themselves in the job and to learn about it' (Rear, 1994a).

2 This raises questions about the applicability of a 'zero-defect' approach to education, as opposed to administration. Higher education is not about right-first-time but about developing ideas and abilities through a process of reflection (Harvey and Green, 1993).

3 For example, seeing quality in terms of perfection ('zero defects' or 'getting things right first time') might be a useful way to cut down the costs of production and monitoring of output but it is indifferent to any absolute evaluation of the attributes of the product and embodies a reductionist view of the nature of the production process. When shifted from the production of inanimate objects to the realms of education, perfectionist approaches to quality have not only little to say about 'standards' but also devalue the transformative process. This devaluation occurs on two fronts. First, a reductionist focus on the minutiae of the chain of customer-supplier interfaces deflects attention from the the educative process as a whole. Second, and related to the first, the emphasis on 'zero defects' is incompatible with the learning process and the development of knowledge. Learning and the development of knowledge is fundamentally a process of critique and reconceptualisation, which is the opposite of a defect-free, right-first-time, mechanistic approach to problem solving (Kolb, 1984; Harvey, 1990; Harvey and Green, 1993). In short, a perfectionist process is at variance with a transformative process.

At best, 'right-first-time' or 'zero-defects' may offer an operationalisation of some aspect of the transformative process. Such operationalisations tend to be specifications to be met in codified customer-supplier arrangements (both internally and externally). For example, it has been used as a tool of delegated administrative responsibility, in which the time-consuming process of checking on the typing output of a subordinate in an administrative section is replaced by an approach which requires the introduction of methods that ensure the output is self-monitored and flawless (Porter and Oakland, 1992). However, this is somewhat peripheral to the transformation process at the heart of educational quality. Where the approach has been used somewhat closer to the staff-student interface, such as the specification of the turnround-time for assessed student work (Geddes, 1992), the emphasis has been on the mechanics rather than the content of the feedback.

Similar analyses can be applied to 'fitness-for-purpose' and 'standards' approaches to quality. They offer a *possible* means by which aspects of transformative quality might be operationalised but are no substitute for getting to grips with the transformative process.

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